



**RULES AND REGULATIONS
GOVERNING THE SUBDIVISION OF LAND**

LUNENBURG PLANNING BOARD

LUNENBURG, MASSACHUSETTS

**ADOPTED UNDER THE SUBDIVISION CONTROL LAW
*SECTION 81 – K TO 81 – GG INCLUSIVE, CHAPTER 41, G.***

ADOPTED – 1985

REVISED – 1986

REVISED – 1988

REVISED – 1989

REVISED – 1994

REVISED – 1996

Major Revision: March 2002

RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND LUNENBURG, MASSACHUSETTS

Table of Contents

SECTION 1.0	PURPOSE, AUTHORITY AND EFFECT
1.1	Purpose
1.2	Authority
1.3	Effect
SECTION 2.0	GENERAL
2.1	Definitions
2.2	Approved Plan Required
2.3	Source of Information Required
2.4	More Than One Building for Dwelling Purposes on a Lot
2.5	Fee and Costs
2.6	Compliance with these Rules and Regulations and Waivers
2.7	Compliance with Zoning Bylaw
2.8	Criteria for Board Action
2.9	Plans Required by Bylaws of the Town of Lunenburg to be Submitted in Accord with these Rules and Regulations
SECTION 3.0	PROCEDURE FOR THE SUBMISSION AND APPROVAL OF PLANS
3.1	General
3.2	Plan Believed Not to Require Approval
3.3	Preliminary Plan
3.4	Definitive Plan
SECTION 4.0	DESIGN STANDARDS
4.1	General
4.2	Streets
4.3	Driveway and Curb Cuts
4.4	Easements
4.5	Open Space
4.6	Protection of Natural Features
4.7	Lot Drainage
4.8	Fire Hydrants
4.9	Sidewalks, Grass Plots, Trees, Curbs, and Berms
4.10	Utilities
4.11	Small Waste Water Treatment Plants
4.12	Sewage Pumping Stations
4.13	Bikeways, Walkways and Trails
4.14	Common Driveways
SECTION 5.0	CONSTRUCTION REQUIREMENTS
5.1	General
5.2	Street and Roadway
5.3	Utilities
5.4	Sidewalks
5.5	Bikeways and Walkways
5.6	Curbs, Beams and Guard Rails
5.7	Grass Plots
5.8	Trees
5.9	Monuments

5.10	Street Signs and Names
5.11	Street Lights
5.12	Driveways, Single/Common
5.13	Areas Disturbed by Construction
5.14	Maintenance of Improvements
5.15	Provision for Competent Supervisions
5.16	Cleanup
6.0	ADMINISTRATION
6.1	Variation
6.2	Reference
6.3	Building Permit
6.4	Inspections
6.5	Meetings
6.6	Validity
6.7	Effective Date

SCHEDULES

Schedule A	Guidelines for Granting Waivers
Schedule B	Standard Cross-section, Major Street
Schedule C	Standard Cross-section, Secondary Street
Schedule D	Subdivision Street Intersection Layout
Schedule E	Typical Temporary Turning Circle without Island
Schedule F	Typical Temporary Turning Circle (Offset) without Island
Schedule G	Typical Permanent Turning Circle with Island
Schedule H	Typical Permanent Turning Circle (Offset) with Island
Schedule I	Project Information Summary
Schedule J	Environmental Impact Statement
Schedule K	Board of Health Review
Schedule L	Rules and Regulations for Telecommunication and Cellular Towers
Schedule M	Typical Title Block
Schedule N	Criteria for Common Driveway Approval

FORMS

Form A	Application for Approval Not Required (ANR)
Form B	Application for Tentative Approval of Preliminary Plan
Form B-1	Certificate of Approval of Preliminary Plan
Form B-2	Certificate of Disapproval of Preliminary Plan
Form C	Application for Approval of Definitive Plan
Form C-1	Certificate of Approval of Definitive Plan
Form C-2	Certificate of Disapproval of Definitive Plan
Form D	Designer's Certificate
Form E	Certified List of Abutters
Form F	Performance Bond—Surety Company
Form G	Performance Bond—Secured by Deposit
Form H	Covenant
Form I	Release Form
Form J	Conveyance of Easements and Utilities
Form K	Inspection Form
Form L	Tabular Summary
Form M	Approval with Lender Agreement
Form N	Removal of Overburden

1.0. PURPOSE, AUTHORITY AND EFFECT

1.1. Purpose

1.1.1. These subdivision regulations are adopted under the provisions of Chapter 41 of the General Law for the purpose of protecting the safety, convenience and welfare of the inhabitants of the Town of Lunenburg by "...regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways and ensuring sanitary conditions in subdivisions and in proper cases parks and open areas. The powers of the Planning Board and of the Board of Appeal under the subdivision control law shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in adjacent public ways; for reducing danger of life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for insuring compliance with the Zoning Bylaw; for securing adequate provision for water, sewage, drainage, underground utility services, fire, police and other similar municipal equipment and street lighting and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the public ways in the Town and with the ways in neighboring subdivisions" (Chapter 41, Section 81M GL).

1.2. Authority

1.2.1. Under the authority vested in the Planning Board of the Town of Lunenburg by Section 81-Q of Chapter 41 of the General Laws of Massachusetts, said Board hereby adopts these Rules and Regulations Governing the Subdivision of Land in the Town of Lunenburg. These regulations shall be effective after approved by the Board and certified by the Register of Deeds and the Recorder of the Land Court.

1.3. Effect

1.3.1. The following rules and regulations shall from and after the effective date thereof govern the subdivision of land within the Town of Lunenburg and no person shall subdivide land in the Town of Lunenburg after such effective date without complying with these regulations and first obtaining from the Planning Board either approval of the Definitive Plan for the proposed subdivision or the endorsement "Approval Under the Subdivision Control Law Not Required" upon such plan.

2.0. GENERAL

2.1. Definitions

2.1.1. Where the terms below are defined also in Chapter 41, Section 81-L, the definition in said Chapter shall govern.

2.1.2. As used in the regulations, the following words or terms shall have the following meanings:

Alley - (Service Road) A narrow strip of land between buildings, especially through the middle of a block, giving access to the rear of buildings and/or lots and which is not owned, constructed, reconstructed or maintained by the Town and which does not qualify for frontage.

Applicant - A person (as hereinafter defined) who applies for the approval of a plan of a subdivision or a person applied under Section 3.0. "Applicant" shall include an owner or his agent or representative or his assigns. (See Chapter 41, Section 81-L, G.L.).

Bench Mark - A mark made in a durable object of known position and elevation as a reference point.

Bikeway - A way designed for travel on a bicycle or similar unpowered vehicle.

Board - The Planning Board of the Town of Lunenburg.

Cellular Tower – A tower used for cellular phone communication equipment. See Schedule L)

Certified By - Certified by or endorsed by the Planning Board, as applied to a plan or other instrument required or authorized by the Subdivision Control Law to be recorded, shall mean bearing a certification or endorsement signed by a majority of the members of the Planning Board or by its chairman or clerk or any other person authorized by it to

certify or endorse its approval or other action and named in a written statement to the Register of Deeds and Recorder of the Land Court, signed by a majority of the Board. (Section 81-L of Chapter 41 G.L.).

Common Driveway - Any drive, right-of-way or private way which provides access to two lots but which does not qualify as a street for determining frontage under Chapter 40A and 41 of the General Laws of Massachusetts.

Designer - Professional Civil Engineer or Land Surveyor registered to practice in Massachusetts. All work defined as professional engineering or surveying shall be done by or under the direct supervision of a registered professional engineer or surveyor.

Develop - To construct a street, install utilities, erect a house or other structure or in any way to improve a lot substantially.

Developer - A person (as hereinafter defined) who develops under a plan of a subdivision approved under Section 3.0. of these Rules and Regulations.

Easement - A right acquired by public authority or other person to use or control property for a utility or other designated public purpose.

Frontage - The linear extent of a lot measured along the street right-of-way from the intersection of said right-of-way with one side lot line to the intersection with the other side lot line of the same lot, but not including any portion thereof devoted to a right-of-way or a driveway serving more than one lot or dwelling unit. Frontage must provide vehicular access to the lot from the right-of-way counted for frontage unless otherwise approved by the Planning Board on a Definitive Plan submitted in accordance with Chapter 41, General Laws or approved by the Planning Board in the same manner as a Definitive Plan. (See also Section 2.7.1.)

General Laws - (Abbreviated G.L.) The General Laws of Massachusetts. In case of a rearrangement of the General Laws, any citation of particular section of the General Laws shall be applicable to the corresponding sections in the new codification.

High Density Area - An area of single family dwellings with a net density of forty thousand (40,000) square feet or less or an area adjacent to such uses and approached only by streets serving such adjacent uses and all two-family or multi-family residence use.

Lot - An area of land in one (1) ownership with definite boundaries used or available for use, as the site of one (1) or more buildings accessory thereto. (Section 81-L of Chapter 41 G.L.)

Low Density Area - An area where the lots are used for single family dwellings and where each lot is greater than forty thousand (40,000) square feet.

Monument - A permanent marker to indicate boundary.

Municipal Service - Sewers, water drains, water pipes, gas pipes, electrical lines, telephone lines, fire alarm system, similar systems and their respective appurtenances. (Section 81-L of Chapter 41 G.L.)

Owner - As applied to real estate, the person holding the ultimate fee simple title to a parcel, tract or lot of land, as shown by the record in the appropriate Land Registration Office, Registry of Deeds or Registry of Probate.

Person - An individual or two or more individuals or a group or association of individuals, a partnership or a corporation having common or undivided interests in a tract of land.

Plan - Approval Not Required. A plan of a proposed subdivision or re-subdivision of land prepared and submitted in accordance with Section 3.0. with the appropriate application to the Planning Board meeting all of the requirements for Approval Not Required.

Plan - Definitive. The plan of a proposed subdivision of land prepared and submitted in accordance with Section 3.0. to the Board for approval (with appropriate application) to be recorded in the Registry of Deeds or filed with the Land Court when approved by the

Board and such plan when approved and recorded; all as distinguished from a preliminary plan.

Plan - Preliminary. A plan of a proposed subdivision or re-subdivision of land prepared and submitted together with the appropriate application in accordance with Section 3.0. to facilitate the proper preparation of a definitive plan.

Planned Residential Area - A unified development of one lot defined by the parcel perimeter, including one or more residential building types, undertaken in accordance with an overall plan, incorporating a consistent architectural concept and incorporating the preservation of natural areas within the development.

Planning Board Agent – Consultant or Town employee or consultant authorized by the Planning Board to review subdivisions and administer the regulations.

Recorded - Recorded shall mean recorded in the Registry of Deeds of Worcester County, except that, as affecting registered land, it shall mean filed with the Recorder of the Land Court. (Section 81-L of Chapter 41 G.L.)

Registry of Deeds - Registry of Deeds shall mean the Registry of Deeds of Worcester Northern District and when appropriate, shall include the Land Court. (Section 81-L of Chapter 41 G.L.)

Roadway - That portion of a way which is designed and constructed for vehicular travel.

Sidewalk - A way within the street right-of-way, generally parallel to the street, designed for use by pedestrians.

Standard Specifications - “The Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges”, edition, as amended.

Street - A way either shown on a definitive plan submitted, approved and recorded in accordance with the subdivision control law or otherwise qualifying a lot for frontage under the subdivision control law. (See also, Way)

Street - Major. A street which, in the opinion of the Board, is being used or will be used as a thoroughfare within the Town of Lunenburg or which will otherwise carry a heavy volume of traffic (generally, over fifteen hundred (1500) vehicles per day).

Street - Minor. A street which, in the opinion of the Board, is being used or will be used primarily to provide access to no more than ten (10) abutting lots and which is not designed to be used for through traffic.

Street - Intermediate. A street which, in the opinion of the Board will normally carry between one hundred (100) and four hundred (400) vehicles per day.

Street - Secondary. A street intercepting one (1) or more minor streets and which, in the opinion of the Board, is used or will be used to carry a substantial volume of traffic (generally, over four hundred (400) vehicles per day) from such minor streets(s) to a major street or community facility and normally including a principal entrance street to a shopping center, industrial park, planned residential area or a large subdivision or group of subdivisions and any principal circulation street within such subdivision.

Subdivision - "The division of a tract of land into two (2) or more lots and shall include re-subdivision and when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided; provided, however, that the division of a tract of land into two (2) or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law, if at the time when it is made, every lot within the tract so divided has a frontage on (a) a public way or a way which the Town Clerk of the Town of Lunenburg certifies is maintained and used as a public way or (b) a way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law or (c) a way in existence when the Subdivision Control Law became effective in the Town, having in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such distance as is then required by the Zoning Bylaw. Conveyances or other instruments adding to, taking away from or changing the size and shape of lots in such a manner as not to leave any lot so affected without the frontage above set forth or the division of a tract of land on which two (2) or

more buildings were standing when the Subdivision Control Law went into effect in the Town into separate lots on each of which one (1) of such buildings remains standing, shall not constitute a subdivision.” (Section 81-L of Chapter 41 G.L.)

Subdivision - Type “A”. A residential subdivision constructed in Residence B District.

Subdivision - Type “B”. A subdivision for non-residential uses or a residential subdivision with average lot size smaller than eighty thousand (80,000) square feet.

Subdivision Control - The power of regulating the subdivision of land granted by the Subdivision Control Law, Chapter 41, Sections 81-A through GG inclusive G.L., as hereinafter amended.

Super Elevation - The cross slope on a highway section to counteract the effect of centrifugal force, expressed as a decimal fraction of a foot of rise per foot of horizontal cross section.

Telecommunications Tower – A tower used for telecommunication equipment and transmitting. (See Schedule L)

Town - Town of Lunenburg, unless otherwise specified.

Trails - A path or track made by or reserved for the passage of persons and/or animals, usually through undeveloped land.

Trees - Large. Trees ten (10) inches or more in caliper four (4) feet above the ground.

Walkway - A way designed for pedestrian use, not necessarily parallel to a traveled way, as contrasted to a sidewalk.

Way - A way is synonymous with the terms: road, street, highway and avenue and shall denote any such line or route for passage, whether public or private.

Way - Accepted. An accepted way is a way which has been accepted as a public way by vote of the Town. (See also 2.9.2.)

Wetlands - as defined by Chapter 131, Sections 40 and 40A G.L.

Width - The width of a way shall be the width of the strip of land laid out, designated, acquired and/or dedicated for the use of such way. Such width includes the spaces for vehicular travel, sidewalks, edgestone and planting spaces where required.

2.2. Approved Plan Required

2.2.1. No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town or proceed with the improvement for sale of lots in a subdivision or the construction of ways or preparation therefore or the installation of utilities and municipal services therein, unless and until a Definitive Plan of such subdivision has been submitted and approved by the Planning Board as hereinafter provided.

2.3. Source of Information Required

2.3.1. In those cases in which the land shown on the plan is abutted by land of an owner not the owner of the land as shown, the Board may require a statement from the person who prepared the plans as to the source or sources of the information about the location of boundaries. A separate form for such statement will be furnished to the Board. Form D - Designer's Certificate. (Appendix).

2.4. More Than One Building for Dwelling Purposes on a Lot

2.4.1. Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision or elsewhere in the Town, without the consent of the Planning Board. Such consent may be conditional upon the providing of adequate ways furnishing access to each such building and adequate improvements in the same manner as otherwise required for lots within a subdivision.

2.5. Fee and Costs

2.5.1. There shall be an administrative fee for each plan application submitted to the Board for consideration, which fee shall be paid upon submission of the plan. The administrative fees are presented in “Fee Schedules and Regulations Governing Fees” adopted by the Lunenburg Planning Board as amended, available at the office of the Planning Board upon request.

2.5.2. Project Review Fees (Including Project Inspection and Monitoring Fees).

2.5.2.1. All review costs which include engineering, professional planning, legal or other professional input plus expenses for advertising, mailing, notices, secretarial and miscellaneous items are shown in “Fee Schedules and Regulations Governing Fees” adopted by the Lunenburg Planning Board as amended, available at the office of the Planning Board upon request.

2.5.2.2. All additional cost through the monitoring and inspection of construction and any other expenses are listed in “Fee Schedules and Regulations Governing Fees” adopted by the Lunenburg Planning Board as amended, available at the office of the Planning Board upon request.

2.5.2.3. The applicant shall place a sum in escrow with the Lunenburg Planning Board and the Town of Lunenburg in accordance with “Fee Schedules and Regulations Governing Fees” to be used for the payment of Project Review Fees.

2.5.3. Failure of the applicant to comply with the requirements of this Section shall be deemed adequate cause for disapproval of the plan.

2.5.4. All matters pertaining to closure of a project shall be subject to the requirements of “Fee Schedules and Regulations Governing Fees”

2.6. Compliance with these Rules and Regulations and Waivers

2.6.1. All plans and all procedures relating to subdivisions and plans not requiring approval shall conform in all respects to the provisions of these Rules and Regulations unless otherwise authorized by the Planning Board in writing when, in the judgment of the Board, such action is in the public interest and not inconsistent with the Subdivision Control Law.

2.6.2. Any such requests for waivers from these Rules and Regulations must be submitted by the applicant to the Planning Board in writing. Approval by the Board must be by vote and confirmed to the applicant in writing and shall become a part of the application.

2.6.3. All requirements of these regulations for a definitive plan shall be met except as may otherwise be provided for a Planned Residential Area in the Zoning Bylaw.

2.7. Compliance with Zoning Bylaw

2.7.1. The Planning Board shall not approve or modify and approve any plan of a subdivision of land unless all buildings, structures and lots shown on said plan comply with the Zoning Bylaw of the Town of Lunenburg or a variance and/or special permit from the terms thereof has been granted.

2.8. Criteria for Board Action

2.8.1. The Board, in considering any proposed subdivision plan, will be concerned with the requirements of the community and the best use of the land being subdivided.

2.8.2. Particular attention will be given to width, arrangement and location of streets, sanitation, drainage, size and arrangement of lots, open areas, parks, retention of major site features and to land uses which preserve the character of the Town.

2.9. Plans Required by Bylaws of the Town of Lunenburg to be Submitted in Accord with these Rules and Regulations

2.9.1. Special permits and certain site plans which now or in the future require submittal and/or approval in the same manner as a Definitive Plan shall be submitted in accord with Section 3.4., except for such items as the Planning Board waives in accord with Section 6.1. and except that the Performance Guarantee shall be in accord with Section 3.4.12. a), b) and c) only.

2.9.2. Private ways not shown on Definitive Plan and approved by the Planning Board under authority of Massachusetts General Laws Chapter 41, Section 81-M, prior to acceptance by the Town.

2.9.2.1. The applicant shall file as-built plans, legal descriptions and deeds as required in Section 3.4.15.

2.9.2.2. The way(s) shall meet the Design Standards contained in Section 4.0. except items waived by the Planning Board in accord with Section 6.1.

2.9.2.3. Construction of the way(s) shall be in accord with the applicable requirements of Section 5.0.

2.9.2.4. A maintenance bond shall be posted in accordance with Section 5.14.

2.9.2.5. Instead of approval in accordance with Section 3.4.11., after a public hearing held in accordance with Section 3.4.9., the Planning Board shall review, vote to recommend the acceptance of the way(s) or not, and transmit a report to the Board of Selectmen and to the applicable Town Meeting, if any. All action of the Board shall be in accord with Chapter 41, Section 81-Q of the Massachusetts General Laws.

3.0. PROCEDURE FOR THE SUBMISSION AND APPROVAL OF PLANS

3.1.General

3.1.1. No plan shall be deemed to have been submitted to the Board until the submission materials, including the plan, together with all required accompanying applications, forms, fees, lists, authorizations, documents, and calculations meet the minimum submission requirements of these *Rules and Regulations*.

3.1.2. No subdivision shall be deemed to conform to these *Rules and Regulations* unless it strictly complies with all requirements of these *Rules and Regulations*, with all requirements of *Protective Bylaw of the Town of Lunenburg*, and with relevant provisions of the following:

- a) All other Lunenburg Bylaws, regulations and policy statements.
- b) All General Laws of the Commonwealth of Massachusetts.
- c) All regulations of Massachusetts Offices, Departments, and Agencies including, but not limited to Massachusetts Highway Department Curb Cut Permits, Massachusetts Department of Environmental Protection (DEP) Water and Wastewater Permits, DEP Wetland Protection Regulations, DEP Stormwater Policies, and filing requirements under the Massachusetts Environmental Policy Act (MEPA).
- d) All Federal Laws.
- e) All regulations of Federal Departments and Agencies including, but not limited to the Department of the Army Corps of Engineers and U.S. Environmental Protection Agency Permits for Stormwater Discharges.

3.1.3. Telecommunication and Cellular Towers

3.1.3.1. Refer to Schedule L for Rules and regulations of the Town of Lunenburg pertaining to Telecommunication and Cellular Towers.

3.2. Plan Believed Not to Require Approval

3.2.1. Submission of Plan

3.2.1.1. Any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with Land Court a plan of land and who believes that his plan does not require approval under the Subdivision Control Law shall submit his plan, the required filing fee, six contact prints and properly executed Forms A and E (see Appendix) to the Planning Board at a regularly scheduled meeting accompanied by the necessary evidence to show that the plan does not require approval. Said person shall file, by delivery or registered mail, a notice with the Town Clerk stating the date of submission for such determination accompanied by a copy of said application and describing the land to which the plan relates sufficiently for identification. If the notice is given by delivery, the Town Clerk Shall, if requested, give a written receipt therefor.

3.2.2. Form and Contents of Plan

3.2.2.1. Said plan shall be of the dimensions seventeen by twenty-two (17 x 22) inches or twenty-four by thirty-six (24 x 36) inches, shall be prepared in such a manner as to meet the Registry of Deeds and/or Land Court requirements for recording and shall contain the following information:

a) Identification of the plan by name of owner of record and location of the land in question including the Assessor's tax map number and lot numbers, the scale, north arrow and date.

b) The statement "Approval Under Subdivision Control Law Not Required" and a signature block in the lower right and side of plan for the date and signatures of all five (5) members of the Board.

c) Zoning classification and location of any Zoning District Boundaries that may lie within the locus of the plan.

d) In the case of the creation of a new lot, the remaining land area and frontage of the land in the ownership of the applicant shall be shown.

e) Notice of any decisions by the Zoning Board of Appeals, including but not limited to variances and exceptions, regarding the land or any buildings thereon.

f) A list of abutters from latest available Assessor's records unless the applicant has knowledge of any change subsequent to the latest available Assessor's records. (Form E, Certified List of Abutters).

g) Names and status of private and public streets and ways shown on the plan.

h) Bearings and distances of all lines of the lot or lots shown on the plan and the distance to the nearest permanent monument. Frontage of each individual lot and total frontage shall be shown.

i) The location of all existing buildings on the land shown on the plan or within fifty (50) feet of its boundaries including set back and side and rear yard designations as determined by the Official Map of the Town Assessors, the Registry of Deeds and other means and location of all wells, on-site sewage systems, and subsurface drainage facilities.

j) Existing contours at two (2) foot intervals and the location of any topographic features which interfere with the use of the frontage for access, such final determination to be made by the Board.

k) Location of all bounds, brooks, fences, walls and bodies of water; including, but not limited to, streams, brooks, water courses, ponds, lakes and other standing bodies of water. Said plan shall reflect the average annual high water level with respect to any such bodies of water.

l) A locus map at a scale of one thousand (1000) feet to the inch.

m) A table listing compliance of each lot with dimensional requirement of Zoning By-law and other regulations.

n) Location of all easements, cart paths, public and/or private rights of way.
(Added n) March 13, 2003)

3.2.3. Endorsement of Plan Not Requiring Approval

3.2.3.1. If the Planning Board determines that the plan does not require approval it shall, without a public hearing and within twenty-one (21) days of submission, endorse on the plan the words "Approval Under the Subdivision Control Law Not Required." Such endorsement shall not be deemed to constitute any determination of compliance with requirements of the Zoning Bylaw.

3.2.3.2. The Planning Board may add to such endorsement a statement of the reason or reasons approval is not required. The original copy of the plan shall be returned to applicant, who shall file it with the Registry of Deeds within ten (10) days and return a receipt of filing to the Planning Board within fourteen (14) days. The Planning Board shall also notify the Town Clerk in writing of its action within twenty-one (21) days of the endorsement.

3.4.16.Determination that Plan Requires Approval

If the Planning Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one (21) days of the submission of the plan, so inform the applicant in writing and return the plan. The Planning Board shall also notify the Town Clerk in writing of its action.

3.2.5. Failure of Board to Act

If the Planning Board fails to act upon a plan submitted under this section or fails to notify the Town Clerk and the Person Submitting the plan of its action within twenty-one (21) days after its submission, it shall be deemed to have determined that approval under the Subdivision Control Law is not required and it shall forthwith make such endorsement on said plan and on its failure to do so forthwith, the Town Clerk shall issue a certificate to the same effect.

3.3. Preliminary Plan

3.3.1. General

A Preliminary Plan of a Subdivision may be submitted by the Applicant, accompanied by Form B. The submission of such a Preliminary Plan will enable the Subdivider, the Planning Board, the Board of Health, Conservation Commission, the Police Department, the Fire Department and other Town departments and owners of property abutting the subdivision to discuss and clarify the details of such Subdivision before a Definitive Plan is prepared. Therefore, it is strongly recommended that a Preliminary Plan be filed in each case. It is also recommended that a "Concept" meeting with the Planning Board be requested by the Applicant prior to the preparation of said plan and application to assure that the requirements of these Regulations are understood and will be met.

3.3.1.1. Any person who wishes to create a non-residential subdivision must, submit a Preliminary Plan, which to be accepted as duly submitted, shall be submitted at a regularly scheduled meeting of the Board and the Applicant shall include the following with the submission:

- a) The Preliminary Plan on reproducible material and seven (7) prints thereof.
- b) A properly executed Application Form B and Designer's Certificate Form D.
- c) The minimum filing fee (See Section 2.5.).

3.3.1.2. The applicant shall also, in accordance with Chapter 41, Section 81 S of the Massachusetts General Laws, file a preliminary plan with the Planning Board and the local Board of Health and a written notice shall be given to the Town Clerk, who shall provide a receipt.

3.3.2. Plan Preparation and Contents

3.3.2.1. The Preliminary Plan shall be drawn on reproducible paper or other reproducible substance with a suitable scale, preferably forty (40) feet to the inch. The Plan shall be designated as a "Preliminary Plan" and to form a clear basis for discussion of the details of the subdivision and for preparation of the Definitive Plan, the Plan shall contain the following:

- a) The subdivision name, if any, boundaries, north arrow, date scale, legend, and index of all pages.
- b) Each page must contain a title block showing the name of the Subdivision, if any, the date, scale, the names and seals and signatures and addresses of the engineer and surveyor who made the plan, the page number and provisions for recording revision dates, including a written description of each revision.
- c) The names and addresses of the record owner of the land and the subdivider, and legend and title "Preliminary Plan", which shall appear in the lower right hand corner.
- d) The names of all abutters, as determined from the last assessment, and, if the applicant has knowledge of changes in the list, to new abutters. (Form E, Certified List of Abutters).
- e) The locus of the land, drawn at a scale of one thousand (1,000) feet to the inch, shown on the plan with sufficient information to accurately locate the plan.
- f) Easements, rights of ways, covenants or restrictions applicable to the area shown on the plan.

g) The existing and proposed lines of streets, ways, easements and any public or common areas within the subdivision, in a general manner.

h) Major features of the land such as existing walls, fences, monuments, buildings, wooded areas, outcroppings, ditches, swamps, water bodies and natural waterways. Where available, aerial photographs may be required.

i) The proposed system of sewage disposal, water installation and of drainage in a general manner, including adjacent existing natural waterways intended to receive drainage effluent.

j) The approximate boundary lines of proposed lots, with numbers, approximate area dimensions, and totaled frontage,

k) The names, approximate location and widths of adjacent streets or streets approaching or within reasonable proximity of the subdivision.

l) The topography of the land with a two (2) foot contour interval based on the National Geodetic Vertical Datum of 1929. Water bodies and other elevations shall be shown.

m) The proposed names of the proposed streets and a number on each lot on each proposed street.

n) The profiles of existing grades and approximate proposed finished grades of the roadway and drain and sewer utilities.

o) For subdivisions greater than ten (10) lots, a phasing plan shall be submitted identifying the limits, sequencing and scheduling of roadway construction.

p) For all subdivisions, the Applicant shall be required to submit a technical memorandum prepared by a qualified traffic engineer to provide the following existing street information at proposed new street intersections:

- (1) representative daily traffic and peak hour volumes
- (2) available horizontal and vertical sight distance
- (3) travel speed measurements and calculation of 85th percentile speed.

In addition, for all subdivisions over ten (10) lots, or where otherwise deemed necessary by the Board, the applicant shall furnish a traffic analysis of the impact of the additional traffic to be generated by the proposed development on the adjacent ways and intersections. Upon application, the Board may waive this requirement.

q) The Applicant shall simultaneously apply for a Request for Determination from the Conservation Commission for any wetland impacts resulting from the Subdivision and present this information as part of the Preliminary Plan process.

3.3.2.2. Additional Filing Requirements

a) Area of adjoining land and water of the applicant not presently being subdivided with sketch plan showing a feasible future street layout for such contiguous land.

b) A Project Information Summary prepared in accord with Schedule I.

c) The zoning classification of land shown on the plan together with any zoning boundary lines within or near the subdivision, if any.

d) Notice of any decisions by the Zoning Board of Appeals, including but not limited to variances and exceptions regarding the land or any buildings thereon.

e) If the Preliminary Plan Application contains more than one (1) sheet or drawing, each sheet or drawing must be titled and numbered and an index showing the contents of each sheet or drawing inserted on the upper left hand corner of the "Preliminary Plan" layout, or as a separate sheet.

f) A written, signed and dated document indicating waivers to these Regulations which may be requested or desired, including the purpose or reason for such waiver.

3.3.3. Approval of a Preliminary Plan

3.3.3.1. The Planning Board may give such Preliminary Plan approval, with or without modification or suggestion, after the Board's review with the Board of Health, Conservation Commission, Water Department, Wastewater Commissioners, Department of Public Works, Police Department, Fire Department and the Planning Board Agent. Such approval does not constitute approval of the subdivision but facilitates the preparation of the Definitive Plan and the securing of final approval thereof.

3.3.3.2. Approval shall be effective for seven (7) months or until a Definitive Plan evolving from the Preliminary Plan is filed, whichever comes first. Within forty-five (45) days after the submission of a Preliminary Plan the Board shall notify the applicant by certified mail that the plan has been approved, or that the plan has been approved with modifications suggested by the Board or agreed upon by the applicant or that the plan has been disapproved. The Planning Board shall notify the Town Clerk of its approval or disapproval as the case may be. After endorsement, the original of the Preliminary Plan will be returned to the applicant.

3.3.4. Disapproval of a Preliminary Plan

In the event of disapproval of a Preliminary Plan, the Planning Board shall state the reasons for its disapproval in accordance with Section 81-S of Chapter 41, G.L. and the original of the plan shall be returned to the applicant.

3.4. Definitive Plan

3.4.1. General

For a Definitive Plan to be accepted as duly submitted in accord with these Rules and Regulations and the General Laws of Massachusetts, any person who submits a Definitive Plan of a Subdivision to the Planning Board for approval shall file with the Planning Board Office all items required in this Section 3.4 and required filing fee (See Section 2.5.). The Planning Board Office will subsequently present the application at a regularly scheduled meeting of the Planning Board. Such submission shall include, as a minimum, the following:

a) An original drawing of the Definitive Plan and twelve (12) contact prints thereof, dark line on white background, together with five (5) half scale reductions thereof and one (1) set of transparencies of the reductions.

b) A properly executed application Form C, *Application for Approval of a Definitive Plan* (see Appendix) including the time within which the applicant agrees to complete the ways and install the public utilities in the subdivision; Form D, Designer's Certificate (see Appendix); and a Certified List of Abutters, Form E, (see Appendix). Approval of the plans shall be upon the conditions that all ways shown thereon and public utilities required by the Board shall be completed and installed within the time so specified.

c) The calculations for the area of all wetlands require to be shown by these Rules and Regulations and a letter from the Conservation Commission indicating concurrence with the wetlands as shown and with the calculations. In the event that the Conservation Commission does not provide such a letter and the plan submitted by the applicant is not accurate or complete, the Planning Board may at the expense of the applicant engage the services of a qualified professional to verify the wetlands as shown and the calculations of the area.

d) If the plan is filed in connection with a Special Permit application under Section 4.2.3. of the Protective Bylaw of the Town of Lunenburg, the plan shall show the

boundaries of all wetlands as defined by Chapter 131, Section 40 of Massachusetts General Laws and 310 CMR 10.00 and as flagged in the field.

e) The applicant shall also file a letter with the Planning Board at the time of submission granting permission to the Planning Board to enter the property for necessary site walks and visits.

3.4.2. Filing Procedure

3.4.2.1. The applicant shall file by delivery or registered or certified mail a notice with the Town Clerk stating the date of submission for such approval accompanied by a copy of the completed *Application for Approval of Definitive Plan*, (Form C).

3.4.2.2. In accordance with Chapter 41, Section 81-T, Massachusetts General Laws, a written notice of submission shall be given to the Town Clerk by delivery or registered mail. Further, in accordance with Chapter 41, Section 81-U Massachusetts General Laws, a copy of said plan shall be filed with the Lunenburg Board of Health.

3.4.2.3. The Definitive Plan shall be prepared by a professional engineer and a land surveyor registered in Massachusetts and shall be clearly and legible drawn in black india ink or plotted upon tracing cloth, mylar or similar substance to the following standards:

a) The classification and precision of surveys shall conform to Class A or better of the most recent Land Court *Manual of Instructions for the Survey of Land and Preparation of Plans*, Commonwealth of Massachusetts. It is required that all other survey and Definitive Plan preparation, where not herein specified, be guided by the *Manual of Instructions*.

b) The plan shall be at a scale of one (1) inch equals forty (40) feet or such other scale as the Planning Board may accept to show details clearly and adequately.

c) Plans and profiles of each individual street shall be at a scale of one (1) inch equals forty (40) feet horizontal and one (1) inch equals four (4) feet vertical.

d) All elevations shall refer to the National Geodetic Vertical Datum of 1929. Sheet sizes shall be twenty-four (24) by thirty-six (36) inches including a three-quarter (3/4) inch border. All plans shall be accompanied by an index sheet at a scale of one (1) inch equals one hundred (100) feet or one (1) inch equals two hundred (200) feet depending on the size of the Subdivision, showing the entire subdivision and adjacent streets and dimensions of the lots and streets and lot numbers, and sufficient to identify the location and the access to the land.

3.4.3. Contents

3.4.3.1. The Definitive Plan shall contain the following information:

a) A Title Sheet containing the Subdivision name, if any, north arrow, legend, title "Definitive Plan," an index or key of all pages and what information is to be found on each page of the plan, a locus map at a scale of one inch (1") equals one thousand feet (1000'), showing all existing town roads located within 3,000 feet of the site, both within Lunenburg and within adjacent towns with town boundaries shown, and a location plan as described in Section 3.4.2.3. (d).

b) Each page must contain a title block in the lower right hand corner showing the name of the Subdivision, if any, the date, scale, the names and seals and signatures and addresses of the engineer and surveyor who made the plan, the page number and provisions for recording revision dates, including a written description of each revision.

c) North arrow, whether true, magnetic or grid benchmark and so indicated and boundaries of the subdivision.

d) Location and ownership of abutting property as it appears on Form E, Certified List of Abutters (see Appendix) and if the applicant has knowledge of changes in the list, to the new abutters, including all abutting land owned by the applicant not presently being subdivided.

e) Major features of the land, such as existing waterways, swamps and water bodies, natural drainage courses, walls, fences, buildings, large trees, trails, wooded areas, outcroppings and ditches which exist on or near the site at the time of survey.

f) Lines of existing and proposed streets, ways, lots, lot numbers or other designation of each lot, easements, trails and public or common areas within the subdivision and the centerline radius of all proposed streets. (The proposed names and numbers of proposed streets and lots shall be shown in pencil until they have been approved by the Planning Board).

g) Base Flood elevation data as shown in the A zone on the Lunenburg Flood Insurance Rate Map (FIRM) and the Flood Boundary and Floodway Maps, dated June 15, 1982, on file with the Town Clerk, Planning Board and the Inspector of Buildings.

h) Sufficient data to determine the location, direction and length of every street and way line, lot line and boundary line and to establish these lines on the ground in accordance with the Massachusetts Highway Department practice. This shall include the lengths and bearings of plan and boundary lines of all subdivision lot lines including lot frontage on the streets, of the boundary lines of all streets and easements and the length, radii, tangents and central angles of all curves in lot lines and street lines. All roadways shall have centerline baselines complete with bearings, distances, curve data, and stations shown on both lot layout and construction plans. All angles points or intersections of tangents along the street lines shall be shown. Areas of lots with lot numbers and frontage on public ways as set forth in Section 81-L of Chapter 41 G.L. of adjoining lands of the applicant not included in the subdivision will be shown.

i) Location of all permanent monuments properly identified as to whether existing or proposed.

j) The zoning district classification of land shown on the plan and the location of any zoning district boundaries that lie within the locus of the plan and the applicable minimum front, side and rear yard depths for each lot as is required by the Zoning Bylaws.

k) Location, names and present widths of streets or private ways bounding, approaching or within reasonable proximity of the subdivisions, showing both roadway widths and rights-of-ways widths.

l) Indication of all easements, covenants or restrictions applying to the land and their purposes, whether or not within the subdivision, including any decision on appeal or any variances or exceptions made by the Zoning Board of Appeals applicable to the subdivision of the land or any buildings thereon.

m) If the property that comprises the subdivision or any part or boundary thereof has been examined, approved, and confirmed by the Massachusetts Land Court, such information shall be noted on the plat with case numbers and other pertinent references to Land Court procedure, then the same requirement shall apply to any adjoining parcels of land of the applicant.

n) The location of all common drives accompanied by the proposed declaration of covenants, easements and restrictions.

o) Street number(s) from the Assessors' Maps.

p) Suitable space to record the action of the Planning Board and the signatures of all members of the Planning Board and, if applicable, all members of the Board of Health including where appropriate the words "Deeds of easements to be recorded herewith" or the words "Approved subject to covenant conditions set forth in a covenant executed by _____, dated _____, and to be recorded herewith".

q) The layout plans shall show sidelines, center lines, points of tangency, length of tangents, length of curves, intersection angles and radii of the curve for each street in the subdivision, together with all buildings, walks, walls, drives and other existing fixtures, within one hundred (100) feet of the side lines of such street. The layout plan shall also show the proposed system of water supply and sewer, when applicable, include size, location and elevation of all storm drains, sewers and water mains and their appurtenances existing in or proposed for each street. The plan shall also show all underground utilities, gas, electrical, cable TV and telephone with legend.

The layout plan shall have a center line in the layout measured to one hundredth (.01) of a foot and stations at one hundred (100) foot intervals in accordance with the practice of the Massachusetts Highway Department. Each straight portion of the center line shall have a bearing and distance given on the center line. The point of curvature and point of tangency of all center line curves shall be indicated by center line stations and radii and length of all center line curves shall be given on the plan. Bounds shall be set at the point of curvature and point of tangency of all curves and shall be described by bearing and off set from center line stations.

3.4.3.2. Street Profiles shall be shown as follows:

a) Directly below the layout plan of each street a profile shall show existing and proposed grades along the centerline of the street, together with figures of elevation at fifty (50) foot intervals along vertical uniform grade and at twenty-five (25) foot intervals along vertical curves. Profiles shall be plotted at forty (40) feet to the inch horizontally and four (4) feet to the inch vertically and drawn in accordance with the Massachusetts Highway Department practice. The drainage and sewerage systems shall be shown on a profile and inverts of all manholes, catch basins, culverts shall be given to one hundredth (.01) foot. The plan shall show when the system begins and terminates to existing systems when applicable. All elevations given shall be referenced from either the National Geodetic Vertical Datum of 1929 or from another Standard Base approved by the Planning Board.

b) All existing and proposed intersections and sidewalks, bikeways and walkways and utilities (storm drains, water mains and sewer mains, if any) shall be shown with all proposed grade elevations calculated. Elevations are to be referred to the National Geodetic Vertical Datum of 1929. Gradients shall be shown by figures expressed in percent.

3.4.3.3. A Contour Plan shall be shown as follows:

a) Existing and proposed topography at two (2) feet contour intervals and by symbols the highest known high water mark of the last five (5) years. There will also be indicated by differentiating symbols the contour line four (4) feet above said high water mark.

b) Grading details shall indicate proposed street grades and elevations, building site grades and elevations and drainage patterns throughout the subdivision sufficient to determine the approximate balance between cut and fill. There shall be a general note indicating the disposition of topsoil on the site, which note shall include how topsoil will be handled in areas of cut and fill; how soil will be stockpiled, if applicable; the minimum amount of topsoil to be redistributed to the site. No overburden shall leave the site without a transportation and disposal plan approved by the Board. Refer to Form N. The Board shall have the right to place conditions on the method and process related to overburden removal from the site. Such conditions may include a daily reporting system, restrictions on the rate of removal, transportation routes, wheel cleaning at point of departure, and remediation of road damage.

3.4.3.4. A Utility Plan shall be shown as follows:

a) Size and location of existing and proposed water supply mains and their appurtenances, hydrants, sewer pipes and their appurtenances and/or storm drains and their appurtenances and easements pertinent thereto and the design, size and location of sewage disposal systems and their appurtenances, dimensions of gutters, including data on borings, soil test pits, and percolation tests made and method of carrying water to the nearest watercourse or easements for drainage as needed, whether or not within the subdivision.

b) If surface water drains will discharge onto adjacent existing streets or onto adjacent properties not owned by the applicant, he shall clearly indicate what course the discharge will take and shall present to the Board evidence from the Superintendent of Streets, the engineer to the Board or the owner of adjacent property that such discharge is satisfactory and permitted by public or private ownership of adjacent street or property.

c) Location of proposed street lights and sidewalks and pedestrian lighting (if required) and transformer pads.

d) If a package treatment plant or waste water treatment plant is proposed, the applicant shall submit a plan showing the size, location, design and provisions for maintenance. See also Section 4.11.

3.4.3.5. Drainage Calculations shall be shown as follows:

Drainage calculations prepared by a Registered Professional Engineer shall be submitted in a suitable form to substantiate proposed drain pipe sizes along with amplifying plans outlining drainage areas within and affecting the subdivision. A plan shall also be submitted showing the route followed by all drainage discharging from the subdivision to the primary receiving watercourse or other large body of water. Drainage calculations and design features and elements shall be prepared in accord with (1) *Stormwater Management—Volume One: Stormwater Policy Handbook* and *Stormwater Management—Volume Two: Stormwater Technical Handbook*, March 1997 as prepared by Massachusetts Office of Coastal Zone Management and the Massachusetts Department of Environmental Protection and (2) *Highway Design Manual*, July 1989 by Massachusetts Department of Public Works. The Stormwater Management Form (*Volume One*) shall be completed, signed and sealed by the Registered Professional Engineer preparing the drainage design, and shall be submitted with the Definitive Plan.

3.4.3.6. A Tree Plan shall be prepared as follows:

Location and species of proposed street trees and location of trees to be retained with trunks over six (6) inches in diameter, measured four (4) feet above the finished ground level, located outside of the street right-of-way line of existing or proposed streets not closer than five feet (5') or more than ten feet (10') from said right-of-way.

3.4.3.7. Cross Sections shall be shown as follows:

a) A typical section of the proposed street shall be drawn to a scale of one (1) inch to four (4) feet and shall be properly located and identified by station number, at such intervals along the street as will adequately indicate any variations in its section, supplemented where necessary by lines on the layout plan showing the width and

location of proposed roadways, grass plots, gutters, sidewalks, utilities (storm drains, water mains and sewer mains, if any) and similar physical features. Provided, however, that where all cross-sections of the street will coincide with the appropriate cross-section shown on the Board's Typical Cross-Section Plans (Schedules B and C), such agreement may be indicated by proper notation on the layout plan and the cross-section drawing may be omitted therefrom.

b) Cuts or fills in excess of six (6) feet at roadway locations resulting in lots being more than six (6) feet above or below grade of the roadway shall be substantiated by the submission of cross sections showing the proposed grading within two hundred (200) feet of the roadway on both sides. Cross sections should be drawn to a scale of one (1) inch to four (4) feet horizontally and vertically.

3.4.3.8. A Tabular Summary shall be prepared:

In tabular form for the total area in square feet and acreage of the Subdivision plan as submitted. See Form L.

- 1) The total area which is being subdivided.
- 2) The total area of lots.
- 3) The total of areas dedicated for street purposes, drainage, sewer or utility easements.
- 3) The total of areas reserved for park, schools and other public use.
- 4) The total area reserved for Open Space.
- 6) The total area in Wetlands as defined by MGL, Chapter 131, Section 40.

3.4.3.9. An Environmental Impact Statement shall be submitted in accord with Schedule J.

a) Items to be included shall be determined by the Planning Board based on information contained in the Schedule I filed with the Preliminary Plan if such a plan was filed. If not, all items of Schedule J must be filed.

b) The document shall be filed with sufficient information to provide a basis for general conclusions about the effect on the environment and the community of the proposed plan compared to any other alternatives permitted under the zoning bylaw. In addition, it shall include a statement in writing concerning the status of the proposed project in relationship to the removal, fill or dredge of any bank, flat marsh, meadow or swamp bordering on any inland water (Wetland Protection Act, Chapter 131, Section 40 G.L.).

3.4.3.10. An Erosion/Sedimentation Control Plan shall be prepared including the following:

3. A clear outline of the areas and type of control proposed.

b) A general note indicating the developer's responsibility to maintain erosion/sedimentation controls during construction and until sale of the lots involved, including the frequency of maintenance.

c) Appropriate details of erosion/sedimentation control devices.

d) The outline of any areas, including drainage ways, steep slopes and proposed stockpile of topsoil that shall be restored and/or seeded immediately.

e) A general note stating that temporary ground cover or erosion/siltation control shall be established on any unbuilt lots where required by the Planning Board.

3.4.3.11. Traffic Study

a) All subdivisions submission, except minor residential subdivisions (10 houses or less) shall include a traffic study conforming to the requirements of this section.

b) The traffic study shall be prepared by a traffic or civil Professional Engineer with at least five (5) years of experience in responsible charge of traffic studies for comparable projects.

c) The traffic study area shall include all intersections and intervening roadway segments within ½ mile radius of the subdivision. Alternatively the applicant may elect to allow the Planning Board to establish the Traffic Study Area.

d) Traffic counts must be taken within one year of the date of submission of the Definitive Plan, and shall include bi-directional 24 hour weekday counts and manual turning movement counts at intersections during the period 6:30 to 9:00 a.m. and 4:00 to 6:00 p.m.

e) Trip generation shall be based upon unadjusted trip generation data taken from the Institute of Transportation Engineers, *Trip Generation, an information Report*, current edition.

f) Trip distribution and traffic assignment shall be projected based upon quantitative evaluation of population, employment, and similar data.

g) Traffic volumes and intersection Level of Service shall be developed for the following cases for each intersection in the traffic study area:

Existing AM Peak Hour
Existing PM Peak Hour
No-Build AM Peak Hour
No-Build PM Peak Hour
Build AM Peak Hour
Build PM Peak Hour

Build with Mitigation AM Peak Hour

Build with Mitigation PM Peak Hour

h) The traffic study shall also address sight distance on all approaches at all intersections and intervening roadway segments, efficiency of the proposed subdivision street layout in terms of responsiveness to traffic desire lines, and accident history of all intersections and roadway segments.

i) For any intersection in the traffic study area where the trips generated by the subdivision increase the No-Build traffic volumes by more than 5 percent the applicant shall fully document the mitigating measures required to restore Existing Case Level of Service, raise all levels of service to LOS D or higher, and abate above average accident occurrence. Mitigation shall include, but is not limited to roadway reconstruction, intersection channelization, addition of turning lanes, signage, pavement markings, lighting, and provision of traffic signal control systems. The study shall include a detailed estimate of the cost of all required off-site improvements and shall clearly state the applicant's financial commitment to fund an equitable portion of the design or construction of off-site improvements.

3.4.3.12. Wetlands

The applicant shall simultaneously apply for a Request for Determination of Applicability or Notice of Intent and receive an Order of Conditions from the Conservation Commission for any wetland impacts resulting from the Subdivision and present this information as part of the Definitive Plan process.

3.4.4. Staking

To facilitate review of the Definitive Plan by the appropriate authorities, at the time of filing of the Definitive Plan, the applicant shall stake the center line and approximate limits of grading of all proposed streets at a minimum of every fifty (50) feet with the center line stations and the cut or fill dimensions to finish grade marked on the stakes.

3.4.5. Soil Surveys and Percolation Tests

Where appropriate the Planning Board may require at the expense of the applicant soil surveys and percolation tests to establish the suitability of the land for the proposed storm drainage installations and proposed street construction. In such case, the applicant shall submit a schedule for this work, and the Planning Board may elect to have its agent witness these tests. Subsurface conditions on the tract, location and results of tests made to ascertain subsurface soil, rock and ground water conditions, depth to ground water, and location and results of soil percolation tests if individual sewage disposal systems are proposed (on a separate sheet) and the suitability of the land for the proposed storm drainage installations, individual sewage disposal systems, if any, and proposed street construction shall be submitted. Such soil surveys and tests must be filed with all plans for non-residential subdivisions or multi-family residences.

a) Test pits, borings or soundings shall be taken along the center line of each street shown on the plan at intervals of at least every two hundred (200) feet and at locations such as cut sections and areas of questionable foundation material where the subsurface conditions may be, in the opinion of the Planning Board or its Agent, factors affecting the quality and service life of the street. Test pits shall not be back-filled until the applicant has been notified by the Planning Board or its Agent that all necessary inspection and sampling has been completed. Where borings are used, samples shall be taken at five (5) foot intervals and at each change in strata. Soundings shall be taken in areas of unsuitable material for the purpose of determining hard bottom contours. Test pits and boring, where required, shall extend to a minimum depth of five (5) feet below the street profile grade or to bedrock, whichever is less. The applicant shall indicate, on the plan, a proposed layout of the subsurface exploration program complete with location, spacing and type of exploration proposed.

b) Soil surveys when required by the Planning Board or its Agent shall include a test excavation not less than seven (7) feet below finished grade at a frequency of one (1) per lot, location of which must be shown on the contour plan and a report thereon; and a percolation test at a frequency one (1) per lot, location of which must be shown on the contour plan and a report thereon. Percolation tests shall be in accordance with Title 5 of the Commonwealth of Massachusetts State Environmental Code.

c) Flood plain, marshes or seasonal wet areas may be included as part of a lot, but may not be altered, filled, drained or relocated and may not be used for building sites, sewerage disposal areas or ways.

d) All lots in a subdivision shall be laid out with the minimum areas required by the Zoning Bylaws to be exclusive of the areas of any pond within such lots.

e) All information concerning the test pits, borings or soundings (location by station number, depth, soil strata, depth of water table) shall be submitted to the Board in a written report to be made, evaluated, stamped and signed by a Registered Professional Engineer.

3.4.6. Other Requirements

Review by Board of Health as to Suitability of the Land (See Schedule F). At the time of filing of the Definitive Plan, the applicant shall also file with the Board of Health two (2) contact prints of the Definitive Plan, dark line on white background, together with such information in the nature of percolation tests and deep test holes as the Board of Health may require plus the information requested on Schedule K, Board of Health Review. The Board of Health shall within forty-five (45) days after filing of the plan report to the Planning Board in writing approval or disapproval of said plan. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any, of the lots shown on such plan cannot be used for building purposes without injury to the public health and include such specific findings and the reasons therefore in such report, and, where possible, shall make recommendations for the adjustment thereof. Every lot, including the unified planned residential lot (PRA) under Special Permit (5.5.), shall be provided with a sewage system or a sewer connection satisfactory to the Lunenburg Board of Health and the Lunenburg Planning Board and/or their agents.

3.4.7. Review by Other Town Officials

3.4.7.1. The Planning Board will transmit copies of the Definitive Plan to Town Officials other than the Board of Health as follows: one (1) copy each to the Department of Public Works, the Conservation Commission, the Water District (if applicable), the Fire Department, the Police Department, the Wastewater Commissioners (if applicable), and the Planning Board Agent.

3.4.7.2. Before the Definitive Plan is approved, the Planning Board will request written statements from the above Officials with regard to the proposed improvements in the following respects:

a) The Department of Public Works, Water Department, Wastewater Commissioners, and/or Planning Board Agent as to the design of the street system, location of easements, monuments, street lights, drainage system, water system, and if applicable, the sewage system.

b) The Fire Department as to location of hydrants, or water sources for fire fighting purposes, installation of the alarm system (if applicable), emergency access, adherence to building codes, and certification from Water District of sufficient water pressure.

c) The Conservation Commission as to potential involvement with Chapter 131, Section 40 G.L. and the effects of the Subdivision on streams, wildlife, and similar considerations within the scope of the Conservation Commission.

d) The Police Department for public safety and traffic issues.

e) The Water District for compliance with standards, impacts of demand and fire flow adequacy.

f) Wastewater Commissioners for compliance with standards and review of sewer extension permit application.

- g) Selectmen for general information and comment.

3.4.8. Common Driveways

When a common driveway is shown on the plan, before final approval of the plan the Planning Board must approve:

- a) An agreement between the owner or developer and the Town of Lunenburg prohibiting the sale of lots and erection of buildings until such time as the common driveways have been constructed in accordance with the approved plan.

- b) A declaration of covenants, easements and restrictions for the use and maintenance of said common drives.

3.4.9. Public Hearing

Before taking any action to approve, modify and approve or disapprove a Definitive Plan the Planning Board shall hold a hearing at which parties in interest shall have an opportunity to be heard, in person or by agent or attorney. Notice of the time and place of such hearing and of the subject matter, sufficient for identification, shall be published once in each of two (2) successive weeks, the first publication to be not less than fourteen (14) days before the date of the hearing in a newspaper of general circulation in the Town of Lunenburg and by mailing a copy of such advertisement to the applicant and to all owners of land abutting the land shown on the plans and on the most recent tax list and to all owners of land within five hundred (500) feet of a property line of the subdivision.

3.4.10. Planning Board Procedures

3.4.10.1. The procedure that the Planning Board will follow with regards to approval, disapproval or modification of the final plan submitted by the applicant will be that as set forth in Chapter 41, Section 81-U of the General Laws, as amended. In summary, the Board, after receiving the Definitive Plan and profiles, will review the same to determine

whether they are in compliance with its adopted Rules and Regulations and the Zoning Bylaw.

3.4.10.2. The Board may decline to approve any plan unless the Applicant agrees to complete the ways shown thereon and install the public utilities aforesaid within two (2) years of the date of his Approval of Definitive Plan or such other time as the Applicant shall specify in writing. If the ways in any subdivision are not completed and the utilities aforesaid are not installed within the time so agreed to by the Applicant, no such way shall thereafter be laid out, constructed, completed or opened for public use unless and until a new application is filed with and approved by the Board. Ways or portions thereof not completed within the agreed upon time shall thereafter be completed in accordance with the then in force requirements and construction standards of the Planning Board and with applicable General Laws. The Board may waive the requirement if the Phased-Growth By-law impedes the full development. See also Section 3.4.16.

3.4.10.3. Before approval of the Definitive Plan, the Board will submit the Plan to an independent engineering service for review at the Applicant's expense (refer to Section 2.5, Fee and Costs).

3.4.10.4. Before final approval of the plan the applicant shall establish that the lots in the definitive plan are in conformity with the Lunenburg Zoning Bylaw and that failure of the lots to so comply will be adequate grounds for disapproval of the definitive plan. See Chapter 41, Section 81-Q of the General Laws and amendments thereto. The Planning Board may approve the plan subject to conditions as may be necessary to bring the plan into compliance. In such event the Board shall endorse such conditions on the plan to which they relate, or set forth a separate instrument attached thereto, to which reference is made on such plan and which shall for the purpose of the subdivision control law be deemed to be a part of the plan. Before final approval all necessary permits under Chapter 131 of the General Law, the Massachusetts Highway Department, the Massachusetts Department of Environmental Protection, and other applicable permitting authorities shall be obtained and the applicant shall notify the Planning Board of any changes in the plan required by said permit or permits.

3.4.10.5 The Planning Board may extend the ninety (90) day period or the one hundred and thirty-five (135) day period, whichever is applicable, permitted by statute between submission of a Definitive Plan and action thereon upon written request of the applicant.

3.4.10.6. If the Board fails to act upon a Definitive Plan for a non-residential subdivision submitted under this section or for a residential subdivision for which a Preliminary Plan was submitted and acted upon by the Board, or forty-five (45) days have elapsed since the submission of the Preliminary Plan and the Board has taken no action thereon or fails to notify the Town Clerk and the persons submitting the plan of its action, within ninety (90) days after its submission, or within one hundred thirty-five (135) days after its submission, for all other subdivisions, whichever is applicable, it shall be deemed to have approval under the Subdivision Control Law and the Planning Board shall forthwith make such endorsement on said plan and on its failure to do so forthwith, the Town Clerk shall issue a certificate to the same effect.

3.4.11. Certificate of Approval

3.4.11.1. The action of the Planning Board in respect to such plan shall be by vote, copies of which shall be certified and filed with the Town Clerk and sent by delivery or registered, return receipt requested, mail to the applicant. If the Planning Board modifies or disapproves such plan, it shall state in its vote the reasons for its action and shall rescind such modification and/or disapproval if the plan is amended to conform to the reasons for said Planning Board action and resubmitted to the Board within seven (7) months of the date of said action. Failure of the Applicant to so resubmit within the stated seven (7) month period shall void the plan and application. Any further action on a plan involving the area or any part thereof shall require a new Application in accord with the Rules and Regulations in force at the time of the new Application. Final approval, if granted, shall be endorsed on the original drawing of the Definitive Plan by the signatures of a majority of the Planning Board but not until the statutory twenty (20) day appeal period has elapsed following the filing of the Board's certificate of approval on Form C-1, or disapproval on Form C-2 (See Appendix), as the case may be, with the Town Clerk and said Clerk has notified the Board that no appeal has been filed. After the Definitive Plan has been approved and endorsed, the Planning Board shall return the original to the applicant.

3.4.11.2. Approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets within a subdivision.

3.4.11.3. The endorsement of plan approval by the Planning Board shall be valid for a period of two (2) years from the date of said approval or such other period of time as is specified in Section 3.4.12. Prior to the expiration of the said approval period, the developer and/or owner shall request in writing to the Planning Board an extension of time if necessary. Failure to request an extension of time prior to the expiration of the said approval period shall result in the Planning Board notifying the Building Inspector that no additional building permits should be issued in said development. The request or extension shall state the reasons for said extension and also the length of time requested. Extension of time shall not in any case exceed one (1) year. Additional extensions after the first may be applied for but not until at least ten (10) months have expired on the extension in effect.

3.4.11.4. The applicant shall file the approved Definitive Plan and covenant, if any, at the Registry of Deeds and shall notify the Planning Board in writing presenting evidence of the recording of the plan and all covenants within ten (10) days of said filing. The applicant shall deliver to the Planning Board two (2) copies of the approval and recorded Definitive Plan, one (1) 105 mm negative and one (1) copy of a Certificate of Title duly searched and executed by an attorney or title company stating that the title to the premises shown on said plan and appurtenances thereto is in the name of the applicant and free of all encumbrances, or including an affidavit giving full details of all encumbrances. In addition the applicant shall file one (1) copy of the approved and recorded Definitive Plan each with the Board of Health, Conservation Commission, Assessors' Office, Water District, Wastewater Commissioners, Police Department and Fire Department.

3.4.12. Performance Guarantee

Before endorsement of the Board's approval of a subdivision, the Board shall require that:

a) The subdivider shall specify in writing the time within which the construction of ways and installation of municipal services required in Section 5.0. shall be completed, which time shall be two (2) years unless the subdivider stipulates otherwise.

b) The subdivider shall secure the construction of ways and installation of municipal services by one, or in part by one and in part by another, of the following methods (Chapter 41, Section 81-U G.L.):

1) By a proper bond, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required in Section 5.0. for lots in the subdivision shown on the plan. See Form F.

2) By a deposit of money or negotiable securities, sufficient in the opinion of the Planning Board to secure performance of the construction of ways and the installation of municipal services required in Section 5.0. for lots in the subdivision shown on the plan. See Form G.

3) By a covenant, executed and duly recorded by the owner of record, running with the land, whereby the ways and services required in Section 5.0. shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed; provided, that a mortgagee who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of such premises or part thereof may sell any such lot, subject to all applicable portions of the covenant including that portion of the covenant which provides that no lot shall be built upon until such ways and services have been provided to serve such lot; and provided, further, that nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant, of either the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board. See Form H.

4) By delivery to the Planning Board of an agreement (Tri-Partite) executed after the recording of a first mortgage covering the premises shown on the plan or a portion thereof given as security for advances to be made to the applicant by the lender, which agreement shall be executed by the applicant and the lender and shall

provide for retention by the lender of funds (otherwise due the applicant) sufficient in the opinion of the Planning Board to secure the construction of ways and the installation of municipal services. Said agreement shall also provide a schedule of disbursements which may be made to the applicant upon completion of various stages of the work and shall further provide that in the event the work is not completed within the time set forth by the applicant, any funds remaining undisbursed shall be available to the Town for completion. See Form M.

c) The subdivider shall submit an agreement, suitable for recording, executed by the Planning Board and the applicant setting forth the form of the guarantee and the stipulated time for completion of improvements as required in 3.4.12.1.a) and b) which shall be recorded in the Registry of Deeds by the subdivider and a receipt therefore be delivered to the Planning Board.

3.4.13. Reduction of Performance Guarantee

The penal sum of any such bond held under 3.4.12. subparagraph b)1. or any deposit held under subparagraph b)2. or any amount of funds retained pursuant to an agreement under subparagraph b)4. shall bear a direct and reasonable relationship to the expected cost, including the effects of inflation, necessary to complete the subject work. Such amount or amounts shall from time to time be reduced so that the amount bonded, deposited or retained continues to reflect the actual expected cost of work remaining to be completed.

3.4.14. Release of Performance Guarantee

3.4.14.1. Upon completion of improvements required under Section 5.0., security for the performance of which was given by bond, deposit, covenant or agreement or upon the performance of any covenant with respect to any lot the developer or owner, at his expense, shall cause to be published in a newspaper of general circulation in the Town of Lunenburg at least fourteen (14) days prior to the final release of the performance bond or surety, an announcement that such release is contemplated and shall deliver to the Planning Board a copy of the page containing a copy of the announcement. He shall also send by registered mail to the Town Clerk and the Planning Board a written statement that the said construction or installation in connection with which such bond,

deposit, covenant, or agreement has been secured, has been completed in accordance with the requirements contained under Section 5.0., such statement to contain:

- a) Name and address of applicant.
- b) A Compliance Certificate signed under oath by the Developer and his Engineer that the development has been completed according to the Rules and Regulations of the Planning Board and the Town of Lunenburg Zoning Bylaws.
- c) Copies of or reference to the requisite number of Inspection Forms and Reports.
- d) An As-Built Plan. See Section 3.4.15.1.
- e) Written evidence from the Planning Board's engineering consultant as to construction of all ways and sidewalks, installation of monuments, street signs, traffic signs, pavement, lighting, gutters and curbs, required grading and drainage, water mains, hydrants and appurtenances, adequate lot drainage, planting and seeding, all in accordance with the Definitive Plan.
- f) Written evidence from the Board of Health as to the installation of on-site sewage disposal facilities, if applicable, or Wastewater Commissioners in the case of public sewers all in accordance with the Definitive Plan.
- g) Written evidence from the Chief of the Fire Department as to the installation of the fire alarm system, all in accordance with the Definitive Plan.
- h) Written evidence from the Office of the Building Inspector as to conformance to the Town of Lunenburg Zoning Bylaw.

3.4.14.2. If the Planning Board determines that said construction has been completed, it shall notify the Town Treasurer within forty-five (45) days, on a properly executed Form I - Release Form, that it releases the interest of the Town in such bond or deposit and that it shall be returned to the person or persons who furnished same, or, in the case of a covenant, it shall issue a written release of the covenant on a properly executed Release

Form. However, a maintenance guarantee providing surety equal to ten per cent (10%) of the total value of the work within the subdivision shall be held by the Town for the proper maintenance of streets and municipal services for eighteen (18) months after completion of construction and installation or until the streets are accepted by the Town, whichever comes first, after which date the Town shall return the remainder of the bond to the person or persons who furnished same.

3.4.14.3. If the Planning Board determines that said construction or installation or filing of the As-Built plan has not been completed, it shall specify to the Town Clerk and the developer in writing by registered mail the details wherein said construction and installation shall have failed to comply with requirements contained under Section 5.0. Upon failure of the Planning Board to act on such application within forty-five (45) days after the receipt of the application by the Town Clerk and the Planning Board, all obligations under the bond shall cease and terminate by operation of law, any deposit shall be returned and any such covenant shall become void.

3.4.14.4. In the event that said forty-five (45) day period expires without such specification, or without the release and return of the deposit or release of the covenant as aforesaid, the Town Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded.

3.4.15. Acceptance by the Town

3.4.15.1. The subdivider shall file with the Planning Board a final as-built plan on tracing cloth, mylar or similar substance of completed street or streets, utilities and easements together with proper legal descriptions for initiating an article in the Town Warrant pursuant to the acceptance of the ways by the Town Meeting and shall grant a deed to the Town of the streets, utilities and easements, as contained in the plan, said deed to be recorded by the Town upon acceptance of the streets by the Town Meeting. The as-built plan shall include

- a) Actual bound locations.
- b) Profile of centerline.
- c) Benchmarks used.
- d) Actual location of all utilities including inverts of all drains and culverts.
- e) The revised road pavement centerline alignment shall be calculated, staked out and shown on the as-built plans.
- f) Any other changes authorized by the Planning Board.
- g) Certification of accuracy to Land Court Standards.
- h) Subdivision lot lines.
- i) Certification of compliance with the Protective By-law of the Town of Lunenburg.
- j) Location of utility service connections to individual lots.
- k) Location of driveways.
- l) Location of curb cuts.
- m) Street lights.
- n) Mail boxes.

3.4.15.2. The surveyor shall place a certification on the plan stating “The street (or way or portion thereof) is laid out and the bounds have been set as shown on this plan” and shall be dated, signed and the surveyor’s stamp affixed thereon.

3.4.16. Phasing

If a subdivision is to be constructed in phases, each phase shall be completed before the next in sequence is begun, unless written permission of the Planning Board is obtained. The permissible number of residential building permits issued per year is set by Section 4.11 of the Protective By-Law of the Town of Lunenburg. Section 4.11.3.1. specifically limits the number of building permits that may be issued per year for the construction of residential dwelling units in a Subdivision.

4.0. DESIGN STANDARDS

4.1. General

4.1.1. Basic Requirements

The subdivider shall observe all design standards for land subdivision as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived, only as provided in Section 6.0.

4.1.2. Conformance with the Master Plan

Any proposed subdivision shall conform to the proposals and intentions of the Lunenburg Master Plan which includes the Conservation Plan of the Conservation Commission and the Open Space Plan as adopted in whole or in part by the Planning Board, unless substitute proposals may be shown to the satisfaction of the Board to serve better the general area of the subdivision and the Town.

4.1.3. Lot Size and Frontage

All lots shall be of such size and dimension to meet the minimum requirements of the Zoning Bylaws.

4.1.4. Access through Another Municipality

In case access to a subdivision crosses land in another municipality, the Board may require certification, from appropriate authorities, that such access is in accordance with the Master Plan and subdivision requirements of such municipality and that a legally adequate performance bond has been duly posted or that such access is adequately improved to handle prospective traffic.

4.2. Streets

4.2.1. Location

4.2.1.1. All streets in the subdivision shall be designed so that, in the opinion of the Planning Board, they will provide safe vehicular travel and an attractive street layout in order to obtain the maximum safety and amenity for future residents of the subdivision.

4.2.1.2. The proposed streets shall conform in location, so far as practical, to any existing plans of the Planning Board, to the Master Plan or parts thereof adopted by the Planning Board and where required by the Planning Board, to the existing street system.

4.2.1.3. Provision satisfactory to the Planning Board shall be made for the proper projection of streets, or for access to adjoining property, whether or not subdivided.

4.2.1.4. Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Planning Board, such strips shall be in the public interest.

4.2.1.5. Adequate Access from Public Way.

a) Where the street system within a subdivision does not connect with or have, in the opinion of the Planning Board, adequate access from a Town, County or State (public) way, the Board may require as a condition of approval of a plan, that such adequate access be provided by the subdivider and/or that the subdivider make physical improvements to and within such a way of access, in accord with the provisions of Section 5.0. of these regulations, from the boundary of the subdivision to a Town, County or State way.

b) Where the physical condition or width of a public way from which a subdivision has its access is considered by the Board to be inadequate to carry the traffic expected to be generated by such subdivision, the Board may require the subdivider to dedicate a strip of public way to a width at least commensurate with that required within the

subdivision and to make physical improvements to and within the subdivision. Any such dedication of land for the purpose of way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way and all costs of any such widening or construction shall be borne by the subdivider.

4.2.2. Alignment

4.2.2.1. Street jogs with centerline offsets of less than one hundred and fifty (150) feet shall be prohibited.

4.2.2.2. The minimum centerline radii of curved streets shall be as follows:

Minor Streets	one hundred fifty	(150')
Intermediate Streets	two hundred	(200')
Secondary Streets	three hundred	(300')
Major Streets	five hundred	(500')

4.2.2.3. A tangent at least one hundred and fifty (150) feet in length shall separate all reverse curves on all streets except where at least one (1) radius is of five hundred (500) feet or more or where the radius of curvature of both the curves is in excess of two (2) times the minimum specified in Section 4.2.2.2.

4.2.2.4. Streets shall be laid out so as to intersect as nearly as possible at right angles. No street shall intersect any other street at less than sixty (60) degrees.

4.2.2.5. Property lines street intersections shall be rounded or cut back to provide for a curb radius in conformance with Schedule D.

4.2.2.6. Streets shall be laid out so as to intersect at intervals in a range of six hundred (600) feet to twelve a hundred (1200) feet in length, unless otherwise specified by the Planning Board. In special instances, the Planning Board may approve an easement for a future street, in lieu of actual construction of a cross street.

4.2.3. Width

4.2.3.1. The minimum width of right-of-way shall be as follows:

a) Minor, intermediate and secondary streets: fifty (50) feet except sixty (60) feet for a secondary street in a Type “B” subdivision or in an area which, in the opinion of the Planning Board, will become a high density area.

b) Major streets and such secondary streets, which in the judgment of the Planning Board may in the future be changed in character to become a major street: sixty (60) feet in a low density area or greater as provided in the paragraph immediately below.

4.2.3.2. When a minor street will provide the only access for lots fronting on a major street, or where potential volume or safety warrants, in the opinion of the Planning Board, the Board may require a greater right-of-way than that specified above and may require construction of a divided roadway.

4.2.4. Grade

4.2.4.1. The centerline grade for any street shall not be less than seventy-five hundredths of one percent (0.75%).

4.2.4.2. The maximum centerline grade for streets shall be as follows:

	<u>Subdivision Type A or Type B</u>
Minor Streets	nine percent (9%)
Intermediate Streets	seven percent (7%)
Secondary Streets	seven percent (7%)
Major Streets	five percent (5%)

4.2.4.3. Where changes in grade exceed on half of one (0.5) percent, vertical curves will be provided. The minimum length of vertical curves shall be designed in accordance with the following:

$$L = K (G_1 \% - G_2 \%)$$

G = Grade

L = Length

The values for K are as listed below:

	Minor, Intermediate and <u>Secondary Streets</u>	Major Streets and Streets in a High Density Area as Determined <u>by the Planning Board</u>
Crests	28	55
Sags	35	55

Roadways should have a cross slope at two (2) percent or one quarter (1/4) inch per foot.

4.2.4.4. The grade of any street except in special instances shall be so designed that the surface run-off of water shall be from the building line to the street. Where one side of a street is superelevated so that surface water run-off cannot drain into the street, provision must be shown for drainage tiles and catch basins, with any easement needed, to prevent overflow onto neighboring lots or erosion of banks.

4.2.4.5. Where a grade is four (4) percent or greater within one hundred and fifty (150) feet of the intersection of street right-of-way lines, there shall be provided in a residential subdivision containing one (1) family dwelling, a leveling area of at least seventy-five (75) feet, with a maximum grade of three (3) percent and in all other subdivisions, a leveling area two hundred (200) feet, with a maximum grade of two (2) percent.

4.2.4.6. Where curves and grades combine to create potentially dangerous driving conditions, the Planning Board may require a suitable amount of super elevation of the curves or other protection.

4.2.4.7. No cut or fill in excess of ten feet (10') of the natural topography shall be allowed within the limits of the roadway cross section.

4.2.5. Dead-end Streets

4.2.5.1. For the purposes of this section, any proposed street which intersects solely with a dead-end street shall be deemed to be an extension of the dead-end street. Dead-end streets and their extensions, if any, shall not be longer than six hundred and fifty (650) feet unless the water system is looped or, in the opinion of the Board, a greater length is necessitated by topography or other local conditions. Dead-end streets shall not be less in length than one and one half (1 1/2) times the frontage required in the District in which it is located. Dead-end streets shall be measured from the right-of-way line of the intersecting street to the center of the cul-de-sac. If a dead-end street is longer than a thousand (1,000) feet in a non-residential subdivision, the Board may require a divided roadway.

4.2.5.2. Dead-end streets shall be provided at the closed end with a turn-around. The minimum paved roadway diameter of turnarounds shall be one hundred feet (100') with an outside diameter roadway dedication of one hundred thirty feet (130') See Schedule E and F. The Board may require, at its option, because of topographic or other considerations, a larger turnaround with a natural traffic island. The turnaround will reach the property line and will conform with Schedule G and H.

4.2.5.3. The Board may require a roadway easement from the end of the dead-end street to adjacent property. If a dead-end street is subsequently extended beyond the required turn-around, any easement other than land required for the extension of the roadway may be relinquished to the adjacent properties. See Schedule E and F.

4.2.5.4. If a dead end street is later extended, the turn-around pavement shall be removed and a uniform pavement width provided to match the extension pavement width.

4.2.6. Street Names

Street names shall be subject to the approval of the Planning Board and Fire Department to provide names in keeping with character of the Town. Proposed street names shall not duplicate nor bear phonetic resemblance to the name of existing public ways, paper streets, or any other way qualified to afford frontage under Section 81-L of Chapter G.L. A proposed street which is in alignment with an existing street shall bear the same name as the existing street.

4.2.7. Streets in More Than One Town

4.2.7.1. Each lot in a subdivision must be served by an approved way lying within the Town bounds.

4.2.7.2. If a subdivision is divided by a Town boundary, the Planning Board shall condition approval of the Definitive Plan on approval of the remaining portion of the plan by the Planning Board of the City or Town in which it is located.

4.2.8. Safety

4.2.8.1. The intersection at the proposed road and accepted Town road will be reviewed, engineered and approved, including signing and/or other protective measures.

4.2.8.2. Speed bumps and like deviation from the Rules and Regulations for safety purposes may be utilized upon approval by the Planning Board.

4.3. Driveways and Curb Cuts

4.3.1. Driveways in subdivisions containing one (1) and/or two (2) family dwellings only shall be at least ten (10) feet wide and have a curb return at the roadway of two (2) feet in radius and shall have an opening of at least sixteen (16) feet at the gutter line.

4.3.2. Driveways in non-residential uses shall be at least sixteen (16) feet wide and have a curb return at the roadway of two (2) feet in radius and shall have an opening of at least twenty (20) feet at the gutter line.

4.3.3. Where rolled curbs or no curbs exist, the driveway flare should have a three (3) foot radius. Driveway cuts shall not be within sixty-five (65) feet of the intersection of the center line of intersecting streets.

4.3.4. If driveway slopes from the edge of the street right-of-way to the edge of the pavement, there shall be a grade of not less than one (1) percent but not more than eight (8) percent, but the grade between the sidewalk and the right-of-way shall be only as shown on the cross-sections, Schedules B and C.

4.3.5. At every intersection, wheelchair ramps shall be provided, adjacent to the granite curb sections required in Section 5.6.1 as required by the Americans with Disabilities Act and Massachusetts Highway Department Standards.

4.4. Easements

4.4.1. Wherever possible, easements shall be centered along side or rear lot lines.

4.4.2. Where utilities cross lots or are centered on rear or side lot lines, easements shall be provided of a width of at least twenty (20) feet.

4.4.3. Where a subdivision is traversed by a water course, drainage way, channel or stream, the Planning Board may require a storm water easement or drainage right-of-way of adequate width and proper side slope to conform substantially to the lines of such water course, drainage way, channel or stream and to provide for construction or other necessary purposes. In no case shall the width be less than thirty (30) feet or the side slope be steeper than three (3) horizontal to one (1) vertical.

4.4.4. Access easements to park and conservation land shall be provided, if required by the Planning Board and shall be at least twenty (20) feet wide.

4.4.5. Wherever possible easements along rear lot lines shall be continuous to the street at the end of the block to connect with the adjoining blocks in the shortest direct line.

4.4.6. Where the applicant/developer provides trails or where trails traverse the land shown on the plan, an easement at least fifteen (15) feet wide shall be shown, which may be limited to passage on foot or horseback. Where the present location of the trails interferes with logical development of the land, adjustments shall be made to relocate the trail or to connect the trail to a street right-of-way, another trail or suitable open space.

4.5. Open Space

4.5.1. Before approval of a plan the Planning Board may also, in proper cases, require the plan to show a park or parks, suitably located for playground or recreation purposes or for providing light and air. The Planning Board may confer with the Department of Public Works and/or the Conservation Commission. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land. The Planning Board may, by appropriate endorsement on the plan, require that no building be erected upon such park or parks without its approval for a period of three (3) years. Each area reserved for such purpose shall be suitable area, dimensions, topography and natural character for the purposes of a park and/or playground. The area or areas shall be so located as to serve adequately all parts of the subdivision as approved by the Planning Board. The Planning Board may require that the area or areas reserved shall be located and laid out so as to be used in conjunction with similar areas of adjoining subdivisions or of probable subdivisions. Unless otherwise specifically approved by the Planning Board, the total amount of area to be reserved for park and/or playground purposes shall be no less than ten (10) percent of the gross area of the subdivision. Any land so reserved shall be graded to dispose properly of surface water and shall be left in condition for the purpose intended, as required by the Planning Board.

4.5.2. Pedestrian ways, bikeways, or bridle paths of not less than fifteen (15) feet in width may be requested where deemed desirable to provide circulation or access to schools, playgrounds, parks, shops, transportation, open spaces and/or community facilities.

4.5.3. The Town shall have the right to acquire ownership of same by gift or as provided in Section 81-Q of Chapter 41 of the General Laws.

4.6. Protection of Natural Features

4.6.1 Due regard shall be shown for all natural features, such as large trees, wooded areas, water courses, scenic points, historic spots and similar community assets, which, if preserved, will add attractiveness and value to the community. Outside of street right-of-ways, no trees over a fifteen (15) inch caliper measured at four (4) feet above the existing grade shall be removed or have the grade level surrounding the trunk altered by more than six (6) inches without approval of the Planning Board after its consultation with the Conservation Commission.

4.6.2. Tree wells or retaining walls should be installed when and as requested by the Board for suitable grading around trees. Tree wells or retaining walls shall be of such design to meet the standards as set forth arborists for the specie of tree involved.

4.7. Lot Drainage

Lots shall be prepared and graded in such a manner that development of one shall not cause detrimental drainage on another; if provision is necessary to carry drainage to or across a lot, an easement or drainage right-of-way of adequate width and proper side slope shall be provided. Where required by the Planning Board or the Board of Health, the Applicant shall furnish evidence as to any lot or lots to either Board that adequate provision has been made for the proper drainage of surface and underground waters from such lot or lots.

4.8. Fire Hydrants

Hydrants shall be provided every five hundred (500) running feet on one side of each street or lesser distance unless a greater distance is approved by the Chief of the Lunenburg Fire Department in writing. They shall be of a style approved both by the Fire Chief and the American Insurance Association and the Lunenburg Water District.

4.9. Sidewalks, Grass Plots, Trees, Curbs and Berms

4.9.1. Sidewalks shall be provided on one side of each street for the full length of major streets. Sidewalks shall be provided in the vicinity of pedestrian generators on major and secondary streets as required by the Planning Board and in any area determined by the Planning Board to be a high density area. Minimum widths of sidewalks shall be four (4) feet.

4.9.2. See Cross Sections in Schedules B and C

4.9.3. Sidewalks, grass plots, trees, curbs and berms shall be shown in accord with these Cross Sections and the requirements of Section 5.4.

4.10. Utilities

4.10.1. Required utilities include water, sewer, storm drainage, telephone, electricity, gas, street lights, fire alarm systems and cable TV unless otherwise specified by the Planning Board. The Applicant shall submit evidence of complete financial arrangements with private utility companies prior to approval.

4.10.1.1. All utilities shall be placed underground at the time of initial construction. The Planning Board may permit transformers, switches and other such equipment to be placed on the ground in approved locations, screened from view with evergreen shrubbery.

4.10.1.2. Where adjacent property is not subdivided or where all the property of the Applicant is not being subdivided at the same time, provision shall be made for the extension of the utility system by continuing the utilities the full length of streets and to the exterior limits of the subdivision, at such grade and size as will, in the opinion of the Planning Board, permit their proper extension at the later date.

4.10.1.3. Connections for drain, water, gas, electric, telephone, and other utility service from the main structure in the way to the exterior line of the way shall be constructed for each lot whether or not there is a building thereon, except that the Board may waive such requirement, in whole or in part, in the case of a lot to be used for a park, playground or for any other purpose for which, in the opinion of the Board, such connections shall not be required.

4.10.2. Sewerage

4.10.2.1. If a public sewerage system is located within five hundred (500) feet down slope from a non-residential subdivision or a multiple family subdivision or within two hundred (200) feet of a one (1) or two (2) family subdivision, all lots shall be connected to the public sewerage system by the developer.

4.10.2.2. If a public sewage system is planned to be installed within two hundred (200) feet down slope of any subdivision within three (3) years of the date of submission of the Definitive Plan as indicated by prior Town Meeting action, the sewer system shall be installed by the developer in the street and to every lot which can be connected later to the public sewerage system.

4.10.2.3. Sewers and appurtenances shall be designed in accordance with the Lunenburg Sewer Use Ordinance and the rules and regulations of the Wastewater Commissioners.

4.10.2.4. If public sewerage connections are not required according to the above, or if the planned public sewerage system has not yet been installed to within the required distance of the proposed subdivision, private on-lot or communal sewerage systems, as approved by the Lunenburg Board of Health, shall be installed in conformity with the rules and regulations of the Board of Health and Title 5, Environmental Code (310 CMR

15.00). The on-lot facility shall be located in the front yard wherever practicable to facilitate connections to an eventual public sewerage system.

4.10.3. Water

4.10.3.1. Every subdivision within the Lunenburg Water District shall be connected to the Lunenburg Water District System unless otherwise approved by the Planning Board and Board of Health.

4.10.3.2. Water, where water systems are required, pipes and related equipment such as hydrant and main shutoff valves, shall be installed within the subdivision as necessary to provide all lots on each street with adequate water supply for domestic and fire protection use.

4.10.3.3. All house connections shall be installed in accordance with the requirements of the Lunenburg Water District.

4.10.3.4. If the Planning Board and Board of Health approves a private well or private water system, the requirements of the Board of Health shall govern the design of the well or system.

4.10.4. Storm Drainage

4.10.4.1. A complete system of drainage shall be constructed in a manner satisfactory to the Planning Board and provide adequate control of surface and subsurface water from the subdivision and adjacent land. Drainage shall be designed to:

- a) Permit unimpeded flow of all natural water courses.
- b) Insure adequate drainage of all low points along streets.
- c) Intercept excessive ground water in the subsoil along the streets.
- d) Intercept storm water runoff along streets at intervals reasonably related to the extent and grade of the area drained.

4.10.4.2. Drainage calculations and design features and elements shall be prepared in accord with *Stormwater Management—Volume One: Stormwater Policy Handbook* and *Stormwater Management—Volume Two: Stormwater Technical Handbook*, March 1997 as prepared by Massachusetts Office of Coastal Zone Management and the Massachusetts Department of Environmental Protection. The Stormwater Management Form (*Volume One*) shall be completed, signed and sealed by the Registered Professional Engineer preparing the drainage design, and shall be submitted with the Definitive Plan.

4.10.4.3. Drainage and erosion control system layout and elements shall be designed shall be designed in accordance with *Highway Design Manual*, Massachusetts Department of Public Works, July 1989.

4.10.4.4. Proper connections shall be made with the existing public drainage system. Where adjacent property is not subdivided, provision shall be made for extension of the system by continuing appropriate drains to the exterior boundaries of the subdivision, at such size and grade as will allow for their proper projection.

4.10.4.5. All drainage piping, facilities and appurtenances shall conform to the standards published in *Construction Standards (1977 Standards or as amended)*, Commonwealth of Massachusetts Department of Public Works.

4.10.4.6. At least three (3) feet of cover will be required over all drains unless otherwise specified or approved by the Board.

4.10.4.7. Drainage rights when appropriate, sufficient and necessary, in the acquiring of the bounds shall be secured for the Town of Lunenburg. Reinforced concrete bounds of the same dimensions as for granite bounds shall be installed at angle points on all easements to the Town of Lunenburg.

4.10.4.8. Drains and catch basins shall not be backfilled until inspected.

4.10.4.9. Provisions shall be made to collect and remove silt from the drainage system during the construction period.

4.10.4.10. The Board may also require provision for subsoil drains, along or near the edge of the traveled way in addition to the trunk line system, wherever, in its opinion, ground water conditions in the subsoil warrant such drains.

4.10.4.11. In no instance shall catch basins be located at driveway entrances.

4.11. Small Waste Water Treatment Facilities

4.11.1. Small wastewater treatment facilities are regulated by the Massachusetts Department of Environmental Protection (DEP). Design must conform to the Title 5 regulations or other regulations applicable and must be approved by the DEP and the Board of Health.

4.11.2. The Board requires that a subdivision proposing a small wastewater treatment plant present an engineering study evaluating other options including decentralized systems and connection to public sewers and demonstrating the cost-effectiveness of the small wastewater treatment facilities over other alternatives. The study must be consistent with the *Lunenburg Wastewater Facilities Plan*, June 1999.

4.11.3. The small wastewater treatment plant shall be designed with a buffer strip of 500 feet extending from the sides of all above and below ground structures to the nearest receptor property line. The buffer strip must be landscaped to screen all structures. The facility must be designed to prevent the emission of odors or noxious gases. The noise levels at the perimeter of the facility site shall not exceed 10 dba above ambient.

4.11.4. The operation of the facility shall conform to all DEP and Board of Health requirements, NPDES permit, and the Title 5 regulations.

4.11.5. The applicant shall present evidence satisfactory to the Board of the means of financing the operation, maintenance, upgrading and continued compliance of the facility in perpetuity. This may be accomplished through covenants with the owners of the subdivided property or through an agreement with the Wastewater Commissioners to accept the ownership and responsibility for the facility.

4.12. Sewage Pumping Stations

Sewage pumping stations shall be designed in accordance with *TR-16 Guides for the Design of Wastewater Treatment Works* (latest edition) prepared by the New England Interstate Water Pollution Control Commission and shall comply with all Sewer Regulations promulgated by the Town and its Wastewater Commissioners.

4.13. Bikeways, Walkways and Trails

4.13.1. Public bikeways, pedestrian walkways or trails may be required by the Planning Board to provide circulation or access to schools, playgrounds, parks, shopping, transportation, open space and/or community facilities or for such other reason as the Board may determine. These may or may not be part of normal sidewalk provisions, but they shall not be a part of any lot in the subdivision.

4.13.2. Bikeways and walkways shall conform to the following standards:

4.13.2.1. Minimum right-of-way width - Fifteen (15) feet.

4.13.2.2. Minimum pavement width for bikeways and walkways - Ten (10) feet.

4.13.2.3. Maximum gradient - Five (5) percent for segments less than one hundred (100) feet in length, three (3) percent elsewhere.

4.13.2.4. Minimum center line radius - Twenty-five (25) feet.

4.14. Common Driveways

4.14.1. Common driveways serving two residences are permitted by Town Bylaw. Refer to Schedule N.

4.14.2. All requirements of Section 3.4.8. must be met.

5.0. CONSTRUCTION REQUIREMENTS

5.1. General

5.1.1. It is the intent that no street or way through private property shall be accepted by the Town unless the same be previously constructed and completed in accordance with the approved Definitive Subdivision Plan and the following specifications. All work done under this section shall be done under the direction of the Planning Board. No aforementioned bond or covenant shall be released until full approval in writing of all work done under this section is received by the Planning Board from the Planning Board Agent. The following minimum specifications shall govern the installation of all roadways, utilities and other improvements in all subdivisions as noted on Typical Cross Section, designated on the Definitive Plan and otherwise determined and approved by the Planning Board. Prior to the commencement of the construction phase of development a pre-construction conference shall be held between the Planning Board and/or their Agent and the Developer and/or his Agent to be sure that all of the requirements herein are understood and will be met.

5.1.2. Unless otherwise specified, all the work and the materials used in the work to be done shall conform to the requirements of the "Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highway and Bridges, 1988 Edition as amended, hereinafter referred to as the "Standard Specifications", and the Special Provisions included hereinafter. Appropriate illustrations are found in "Commonwealth of Massachusetts, Department of Public Works, 1977 Construction Standards as amended".

5.1.3. Supplementing the aforesaid Standard Specifications, certain specifications or special provisions shall apply particularly to the work to be done hereunder. References in the following specifications, unless otherwise stated, are to the aforesaid Standard Specifications, amendments or addenda. These specifications and special provisions shall take precedence and shall govern when they are stricter.

5.1.4. To facilitate reference, each paragraph in these specifications is noted with the paragraph number of the particular section as contained in the Standard Specifications.

5.1.5. Wherever in the Standard Specifications or other contractual documents, the following terms, or pronouns in place of them, are used, the intent and meaning shall be interpreted by substitution as follows:

“Commonwealth” Town of Lunenburg

“Department” Lunenburg Department of Public Works

“Engineer” The Planning Board of the Town of Lunenburg acting directly
or through an authorized representative; such representative
acting within the scope of the particular duties entrusted to
him.

5.1.6. The extent of work required shall be as shown upon approved plans, and in compliance with the Standard Cross Section Plans. Stakes shall be set which will indicate the exact amount of cut or fill.

5.1.6.1. Offset stakes shall be set under the direction of a Registered Land Surveyor at fifty (50) foot intervals and at each sewerage and drainage structure and at each hydrant to indicate the location and the exact amount of cut, fill or grade.

5.1.6.2. Improvements to minimize adverse environmental impact, if required, shall be installed in accordance with all details as shown on the approved definitive plan and all possible measures shall be taken during construction to minimize dust and erosion.

5.1.6.3. No earth shall be removed from the area shown on a Definitive Plan except in accordance with the approved plan.

5.1.7. As each construction operation is completed, it shall be inspected and approved by the proper Town authority prior to starting working on the succeeding operation.

5.2. Street and Roadway

5.2.1. The roadway shall be graded and prepared for pavement as follows:

5.2.1.1. 101 Clearing and grubbing of the entire area of such street or way shall be performed to remove all trees not intended for preservation, stumps, brush, roots, rocks or boulders and like material which may exist upon the surface.

5.2.1.2. 120 Roadway earth excavation shall remove all materials encountered down to the true surface of the subgrade, or to suitable material in areas where unsuitable material exists, in preparation for foundation of roadway, sidewalks, driveways and berms. Materials obtained from the excavation may be used in fills as needed if they are sampled and tested by an independent testing laboratory acceptable to the Board or its Agent and, in the opinion of the Board or its Agent, the material satisfies the requirements of Section 150 of the Standard Specifications. Necessary laboratory testing to determine the suitability of the excavated soil, shall be arranged for and paid for by the Applicant.

5.2.1.3. 150 When, in the opinion of the Planning Board, suitable material is not available within the limits of the highway location to form the subgrade or sub-base, the contractor shall obtain such additional material from other sources in accordance with this section and as may be approved by the Planning Board or its Agent. A certificate of compliance along with information on the source of the material being used shall be submitted to the Board or its agent for approval prior to use.

5.2.1.4. 170 The subgrade surface, sixteen and one half (16-1/2) inches below the finished surface grade in minor, intermediate, and secondary streets, and eighteen (18) inches below the finished surface grade in major streets in residential subdivisions and in all streets in non-residential subdivisions, shall be prepared true to the lines, grades and cross sections given and properly rolled. All soft or spongy material below the subgrade surface shall be removed to a depth determined by the Planning Board and

the space thus made shall be filled with special gravel borrow containing no stones over six (6) inches in their largest diameter.

5.2.1.5. 401 Gravel sub-base or foundation containing no stones having any dimensions greater than six (6) inches shall be spread in two (2) equal layers on the surface of the subgrade to a minimum depth of twelve (12) inches in conformity with requirements of Section M 1.02.0. The first six (6) inches of gravel borrow shall be Type A as specified in the Standard Specifications and the top six (6) inches shall be Type B as specified in the Standard Specifications. To assure compliance with the Standard Specifications, the Planning Board may authorize, at the applicant's expense, a testing of the gravel by an independent testing company. Each layer shall be thoroughly watered, rolled and compacted true to line and grade. Any depressions that appear during and after the rolling shall be filled with additional gravel and re-rolled until the surface is true.

5.2.1.6. 401.60 Final grading, rolling and finishing including the shaping, trimming, rolling and finishing of the surface of the sub-base prior to application of bituminous concrete for surfacing of the roadway and base courses for walks or loam for berms shall be in accordance with this section as directed by the Planning Board.

a.) If the Planning Board determines that enough time has elapsed to make it desirable, a tack coat meeting their specifications shall be applied prior to the application of the second layer of bituminous concrete.

b.) At the conclusion of this step the roadway shall be staked in all locations where permanent monuments are to be installed as provided in Section 5.9.

5.2.2. Roadways shall be constructed for the full length of all streets within the subdivision. The center line of all roadways shall coincide with the center line of the street right-of-way unless a deviation is approved by the Planning Board. The minimum and maximum widths of roadways shall be as follows:

	Right-of-Way Width as Required <u>In Section 4.2.3.1.</u>	Pavement <u>Width</u>
Major Street	60 feet	30 feet
Secondary Street	50 feet	24 feet
Intermediate Street	50 feet	24 feet
Minor Street	50 feet	22 feet

All pavement widths shall be as defined above but are subject to alteration by the Planning Board at its option. Pavement width shall be measured from within the inside edge of the curb or berm.

5.2.3. 460 The wearing surfaces of roadways shall be of Class I Bituminous Concrete Pavement, Type I-1, unless otherwise approved or required by the Planning Board. The pavement shall be constructed in conformity with lines, grades and typical cross-section shown on plans. Material and construction methods shall conform to all other requirements of Section 460 of the Standards Specifications except that no such construction shall be undertaken before March 30th of any year nor after November 1st of any year without written permission of the Planning Board, and shall be applied only in dry weather.

5.2.3.1. Final compacted pavement thickness for major and minor Subdivision roadways shall conform to the following:

Major Road:

Base Course: Four and one-half inches (4.5") of Class I Bituminous Concrete Type I-1 in two lifts: Two inches (2") Dense Binder Course Material over two and one-half inches (2.5") Binder Course Material.

Surface Course: One and a half inches (1.5") of Class I Bituminous Concrete Type I-1 Top Course Material.

All Other Roads:

Base Course: Three Inches (3") of Class I Bituminous Concrete

Type I-1 Binder course material in one lift.

Surface Course: One and a half inches (1.5") of Class I Bituminous Concrete Type I-1 Top Course Material.

Once the Roadway Base Course has been placed, the Developer shall maintain this surface until the roadway surface course is placed and accepted.

5.2.3.2. Surface courses damaged by the Developer or his Contractors, following its acceptance by the Planning Board and its Agent, shall be restored or resurfaced by the Developer at his expense.

5.2.4. 685 Embankments outside, within or adjoining the right-of-way shall be evenly graded and pitched at a slope of not greater than four (4) horizontal to one (1) vertical (4:1). Where steeper slopes are required, the slope may be increased to a maximum of 2:1 with the approval of the Planning Board. Where cuts are made in ledge, other slopes may be determined with the approval of the Planning Board. Where terrain necessitates greater slopes, retaining walls, terracing, fencing, or rip-rap may be used either alone or in combination to provide safety and freedom from maintenance, but must be done in accordance with plans filed with and approved by the Planning Board. Guard rails shall be furnished wherever the slope is greater than, two (2) horizontal to one (1) vertical downhill with a vertical drop in grade of four feet (4') or greater, or wherever the slope is three (3) horizontal to one (1) vertical downhill with a vertical drop in grade of fifteen feet (15') or greater. Whenever embankments are built in such a way as to require approval by the Planning Board, the developer must furnish to the Town duly recorded access easements free of encumbrances for maintenance of the slopes, terraces or retaining walls. All such slopes shall be grassed in accordance with the specifications for the area between the roadway and sidewalk or roadway and boundary of the right-of-way.

5.2.5 Loam shall be placed on all shoulders, embankments and other areas disturbed by the construction to a depth of four (4) inches. Grass conforming to Section M 6.03.0 of the Standard Specifications shall be placed at the rate of four (4) pounds per on thousand (1000) square feet, or such other ground cover as the Planning Board may approve.

5.3. Utilities

5.3.1. Installation and materials unless otherwise specified shall conform to the standards of the Town of Lunenburg.

5.3.1.1. 140 Excavation for structures, including foundations for drains, sewers and water pipes, wells and other structures shall be made to the depth as indicated on the Definitive Plan or established by the Planning Board as appropriate. Rock excavation designated as Class B, encountered in trench excavation, shall be removed as directed by the Planning Board.

5.3.1.2. 200, 230, 301 All drain, sewer, gas and water pipes, underground utilities, and other structures shall be installed upon the completion of roadway subgrade and before the placing of the sub-base, gravel base course, sidewalks or pavement. If the pavement is removed, excavated or damaged, the trench shall be covered with a poured reinforced concrete slab to the lines, grades and dimensions approved by the Planning Board.

5.3.1.3. Where adjacent property is not subdivided or where all the property of the applicant is not being subdivided at the same time, provision shall be made for the extension of the utility system by continuing the mains the full length of streets and to the exterior limits of the subdivision, at such grade and size which will, in the opinion of the Planning Board, permit their proper extension at a later date.

5.3.2. Water

5.3.2.1. Public water mains and related facilities shall be installed to the standards of the Lunenburg Water District. Hydrants shall be located as specified in Section 4.8. and in conformance with specifications of the American Water Works Association.

5.3.2.2. Each hydrant shall be served directly from the water main through a minimum six (6) inch lateral connection. It shall be gated with a six (6) inch diameter gate valve and valve box located at the tee connection. It shall be furnished with a five and one quarter (5-1/4) inch main bottom valve opening and shall have two (2) two and one half (2 1/2) inch hose outlets and one four and one half (4 1/2) inch pump outlet. Hydrant

flange shall be level with the finished sidewalk or ground surface. Water main valves shall be located in such number and locations that lines by individual blocks may be isolated for maintenance purposes.

5.3.2.3. If the Subdivision is not within the limits of the Lunenburg Water District, the subdivider may install a private on-lot water system.

5.3.2.4. Private on-lot water systems shall be Installed in strict accord with Board of Health standards and requirements, Massachusetts Department of Environmental Protection Regulations, and applicable Federal statutes.

5.3.2.5. Community-type systems or the joint use of wells shall be subject to the standards of Massachusetts Department of Environmental Protection Regulations, and applicable Federal statutes, and acceptance by the Lunenburg Board of Health.

5.3.3. Sewerage

5.3.3.1. Where public sewers are required, they shall be designed in accordance with the Lunenburg Sewer Use Ordinance and the rules and regulations of the Wastewater Commissioners.

5.3.3.2. Private on-lot or communal sewerage systems, as approved by the Lunenburg Board of Health, shall be installed in conformity with the rules and regulations of the Board of Health and Title 5, Environmental Code (310 CMR 15.000). The on-lot facility shall be located in the front yard wherever practicable to facilitate connections to an eventual public sewer.

5.3.4. Drainage

5.3.4.1. 200, 220, 230 Adequate disposal of surface and sub-surface water shall be provided and pipes, manholes and catch basins shall be provided according to the sizes and depths as indicated on the plans and in conformity with the requirements of Sections 200, 220, 230 of the Standard Specifications and shall be built on both sides of the roadway at intervals not to exceed three hundred (300) feet unless otherwise approved by the Planning Board, and at such other places as deemed necessary by the Planning

Board to assure an unimpeded flow of all natural watercourses, to assure adequate drainage of all low points and to provide proper runoff of storm water. In no instances shall catch basins be located along a driveway cut. The standard depth of catch basins shall be four (4) feet below the invert of lowest drain. Manholes shall be constructed to the required depth at each junction point and as shown on the plan. Pipe culvert and pipe drains shall be in conformity with the requirements of Section 230 for installation of pipes.

5.3.4.2. Cement concrete pipe and reinforced concrete pipe (used on all cross drains under pavements) or other pipe acceptable to current Massachusetts Highway Department Standards shall be installed according to the size as shown on the plans. No backfilling of pipes shall be done until the installation has been inspected by the Planning Board Agent. All drainage trenches except cross drains shall be filled with clean gravel borrow in accordance with specification 760. All cross drain trenches shall be backfilled with selected material satisfactory to the Planning Board Agent.

5.3.4.3. 260 Where sub-drains are required they shall be constructed in conformance with Section 260 of the Standard Specifications. The size of pipe shall be in accordance with the approved Definitive Plan and in any case shall not be less than twelve (12) inches in diameter. Pipe for the construction of culverts and drains shall be reinforced concrete except where such culverts or drains pass under a roadway or driveway in which case they shall be reinforced concrete (extra strength). All pipes shall be laid true to line and grade as shown on the Plan. Each section of pipe shall have a full, firm bearing throughout its length. All joints shall be made of Portland Cement Mortar unless otherwise directed. Minimum covering of all pipe shall be no less than thirty-six (36) inches.

5.3.5. Gas

5.3.5.1. Gas mains shall be installed if gas connection is available unless said installation is specifically waived by the Planning Board.

5.3.5.2. The Gas Company shall be notified by the developer upon approval of the Definitive Plan so that installation of gas mains may be completed without undue delay.

5.3.5.3. If excavation is made after the roadway subgrade is completed and inspected, the mains shall be put in a trench covered with a poured reinforced concrete slab to the lines, grades and dimensions approved by the Planning Board.

5.3.6. Telephone and Electricity

5.3.6.1. Telephone lines shall be installed in underground conduits in conformity with Section 801 of the Standard Specifications. Electric lines shall be installed underground in accord with the regulations of the Massachusetts Electric Company. The Planning Board may permit transformers, switches and other such equipment to be placed on the ground in approved locations.

5.3.7. Other Utilities

5.3.7.1. Any and all wiring shall be installed underground and may be in the same trench with vertical and/or horizontal separation as approved by the Planning Board. Service shall be provided to each lot and each street light before the subgrade is prepared.

5.3.7.2. Other utilities shall be installed in underground conduits in accord with Section 800 of the Standard Specifications or as required by the utility company or department.

5.4. Sidewalks

5.4.1. Sidewalks shall be constructed within the subdivision, separated from the pavement area by a seeded grass plot. See Section 5.7. When unusual topographic conditions require, the Board may approve the placement of a sidewalk at a greater distance from the roadway or at a higher or lower elevation in relation thereto, provided such variation is indicated on the Definitive Plan and accompanying cross-sections.

5.4.2. Sidewalks shall have a finished grade in relation to the finished grade of the roadway as shown on the applicable cross-section plan and shall extend the full length of each side of the street.

5.4.3. All materials shall be removed for the full width of the sidewalk to subgrade twelve (12) inches below the finished grade as shown on the Cross Sections, Schedules B and C.

5.4.4. 701 Bituminous concrete sidewalks laid in two (2) courses, each of one and a quarter (1-1/4) inch, shall have thickness of two and one half (2 1/2) inch after compression, shall be constructed on a nine and on half (9 1/2) inch gravel foundation to the required lines and grades in accordance with the Standard Specifications.

5.4.5. 701 If the applicant prefers to install cement concrete sidewalks, they shall be constructed in conformity with this section of the Standard Specifications.

5.5. Bikeways and Walkways

5.5.1. 701 Except as specified herein, where bikeways and walkways are required, they shall be constructed in conformance with Section 701 of the Standard Specifications.

5.5.2. Specifications for sidewalks contained in Section 5.4. shall apply to bikeways and walkways.

5.5.3. For the length of each bikeway and walkway there shall be a cross slope equivalent to three-eighths of one (3/8) inch per foot of width to provide for proper drainage. Leveling areas at intersections with sidewalks shall be shown in details.

5.6. Curbs, Berms and Guard Rails

5.6.1. Bituminous concrete berms and curbs of six (6) inches in height and one (1) foot in width (right triangular cross section) shall be provided along each side of the roadway except that granite curbs of the same height and Type VA4 (sub section M 9.04.) shall be provided:

5.6.1.1. Along each edge of a roadway where the grade exceeds five (5) percent.

5.6.1.2. On the inner side of all curves with a radius less than two hundred and fifty (250) feet.

5.6.1.3. At intersections along the roadway the distance of the arcs of the curves plus a straight section at each end of fifteen (15) feet.

5.6.2. In the event that the Planning Board waives curbs and berms, paved gutters shall be provided along each edge of the roadway where the grade exceeds three (3) percent.

5.6.3. The profile of the berm is subject to Planning Board approval.

5.6.4. 600 Guard rails shall be installed for safety at curves or filled areas as required by the Planning Board, in accordance with the Standard Specifications for steel beam guard rails.

5.7. Grass Plots

5.7.1. 751, 765 A minimum four (4) foot grass plot shall be provided on each side of each roadway between the inside edge of curb and sidewalk areas, where sidewalks are required, and shall occupy all the remaining area not paved up to the right-of-way lines. The top four (4) inches of all required grass plots shall consist of good quality loam, rolled and planted.

5.7.2. Grass shall be used unless other ground cover is approved by the Planning Board. Seed shall conform to Section M 6.03.0 of the Standard Specifications.

5.7.3. The slope of the grass plot shall be a maximum of two (2) feet horizontal to one (1) foot vertical.

5.7.4. Street light stanchions and street lights shall be located at least ten (10) feet from the edge of the roadway in the grass plot or in the median, if there is one, but shall not be nearer than twenty five (25) feet from the intersection of two (2) streets, measured from the intersection of the tangents of the intersecting street curb lines. If street lights are located in the median, the Board may require pedestrian lighting placed in the grass plot. See also Section 5.11.

5.8. Trees

5.8.1. Street trees of a species approved by the Planning Board shall be planted on each side of each street in a subdivision, except where the Definitive Plan showed trees to be retained which are healthy and adequate. Such trees shall be located outside of the right-of-way as shown in the Profile and Standard Cross Sections Schedules B, C, approximately at forty (40) foot intervals, and shall be at least twelve (12) feet in height, two (2) inches in caliper measured four (4) feet above the approved grade, and shall not be closer than five (5) feet nor more than ten (10) feet from said right-of-way line. Trees shall be planted in accordance with Section M 6.06.0 and M 6.09.0 of the Standard Specifications.

5.8.2. The developer shall plant other trees as needed to provide at least one (1) area of shade to each lot.

5.8.3. All deciduous street trees shall be clear of any branches from the approved grade level to a point seven (7) feet above ground level.

5.8.4. The developer will be liable for all trees so planted as to their erectness and good health for one (1) year after planting.

5.8.5. No evergreen trees such as pine, fir, spruce or hemlock are to be planted on an easterly or southerly side of a road, street or way.

5.8.6. Except as otherwise provided, all cut banks shall be planted with a low growing shrub or vine and wood chipped to a minimum depth of six (6) inches or seeded with a deep-rooted, perennial grass to prevent erosion. See also Section 5.2.4.

5.8.7. All reasonable care shall be exercised to preserve the trees in the subdivision.

5.9. Monuments

5.9.1. Monuments shall be installed on street lines at all points of intersections of streets with each other and at all points of curvature, at all points of change in direction,

at each point where the lot line intersects the street right-of-way and at all other points where, in the opinion of the Planning Board, permanent monuments are necessary.

5.9.2. Monuments shall be a standard permanent granite or reinforced concrete marker of not less than three (3) feet in length and not less than five (5) inches in width and breadth and shall have a three-eighth (3/8) inch drill hole in the center of the top surface. Said monuments shall be installed at the time of final grading with the top flush with the top final graded surface. Steel pins and drilled holes in existing stone walls may be acceptable but must be presented to the Planning Board for approval.

5.9.3. The placement and accurate location of these markers shall be certified by a registered land surveyor and properly located on the as-built plans.

5.10. Street Signs and Names

5.10.1. Street signs shall be installed at each intersection to conform to the standards established by the Town of Lunenburg Planning Board and the Department of Public Works.

5.10.2. Street names shall be subject to the approval of the Planning Board and Fire Department to provide names in keeping with character of the Town. Proposed street names shall not duplicate nor bear phonetic resemblance to the name of existing public ways, paper streets, or any other qualified to afford frontage under Section 81-L of Chapter G.L. A proposed street which is in alignment with an existing street shall bear the same name as the existing street.

5.10.3. From the time of rough grading until such time as each street is accepted by the Town as a public way, the sign posts at the intersection of such street with any other street shall have affixed thereto a sign designating such street as a private way.

5.11. Street Lights

5.11.1. Street and pedestrian pole and light types shall be approved by the Planning Board.

5.11.2. Street and pedestrian light stanchions shall be located at such intervals as required by the Planning Board in the grass plot or median, as provided in Section 5.7.4. and shall be installed in accord with the procedure required by the Utility Company.

5.12. Driveways, Single/Common

5.12.1. The driveway shall be graded in accordance with Section 5.1. and a wearing surface applied in accordance with Section 5.2.3.1., unless a lesser thickness is approved by the Planning Board, to a width of at least fifteen (15) feet and to the edge of the roadway right-of-way.

5.13. Areas Disturbed by Construction

5.13.1. Before approval of a Subdivision, the Developer shall prepare and submit for approval of the Board or its Agent an Erosion Control Plan covering all phases of construction for the area in which he intends to perform work. This area shall be specified and may include the portion of work within the right-of-way or may include all or part of the lots depending on the extent of work and location of wetlands.

5.13.2. Loam and grass seed shall be placed on all shoulders, embankments, and other areas disturbed by construction in accordance with the Erosion/Sedimentation Control Program, and the following factors shall be considered during all phases of construction:

5.13.2.1. No larger area shall be developed than that on which construction can be completed rapidly so that large areas are not left bare and exposed for long periods.

5.13.2.2. Grading shall be kept at a minimum. Where possible, existing trees and vegetation shall be protected and retained. Only undesirable trees shall be removed.

5.13.2.3. Drainage shall be maintained by the contractor during construction. Runoff shall be controlled and conveyed into storm sewers or other outlets so it will not erode the land or cause off-site damage.

5.13.2.4. Critical areas including embankments and slopes, exposed for periods in excess of one month, shall be protected during construction with mulch or temporary crop covers and with mechanical measures such as diversions and prepared outlets.

5.13.2.5. Sediment basins, temporary and permanent, shall be constructed where necessary to detain runoff and to trap sediment during construction.

5.13.2.6. Safe off-site disposal of runoff shall be provided, including the increased runoff resulting from construction.

5.13.2.7. Permanent vegetation and erosion control structures, where necessary, shall be installed as soon as possible.

5.13.2.8. In all cases where rip-rap is utilized, rip-rap shall be of a size specified by the Board or its Agent and placed, rather than damped.

5.14. Maintenance of Improvements

5.14.1. For the purpose of protecting the safety, convenience and welfare of the Town's inhabitants; for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for reducing the danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; under the authority of Chapter 41, Section 81M as amended, the applicant or his successor shall provide for the proper maintenance and repair of improvements under this Section or the Rules and Regulations during the construction and for the period of eighteen (18) months after the completion of the construction of said improvements and the release of security or until the Town votes to accept such improvements, whichever comes first (see Section 3.4.14.2.). Such maintenance shall include snow removal beginning at the time of occupancy of an individual owner or tenant other than the developer.

5.15. Provision for Competent Supervision

5.15.1. The applicant shall provide competent supervision during the development of his subdivision. If at any time, it becomes apparent to the Planning Board that the

supervision is not satisfactory, they may order the discontinuance of the development until competent supervision is provided.

5.15.2. This shall include the necessary supervision to make sure that all temporary drainage controls, erosion and sedimentation controls, stock pile controls and other such measures as contained in the approved Definitive Plan are adequately and properly provided and maintained.

5.16. Cleanup

5.16.1. Any area disturbed by the construction and all rights-of-way shall be cleaned up so as to leave the area shown on the Plan in a neat and orderly appearance free from debris, tree stumps, loose rocks, mounds of dirt or other objectionable material. Seeding of these areas may be required by the Planning Board.

5.16.2. Any stumps remaining from destroyed trees shall be removed off site or ground on site.

6.0. ADMINISTRATION

6.1. Variation

Strict compliance with the requirements of these Rules and Regulations may be waived when, in the judgment of the Planning Board, such action is in the public interest and not inconsistent with the Subdivision Control Law. Any such waivers granted must be requested by the Applicant in writing and approved by vote and in writing by the Planning Board. Refer to Schedule A, Guidelines for Granting Waivers.

6.2. Reference

For matters not covered by these Rules and Regulations, reference is made to section 81-K to 81-GG, inclusive, of Chapter 41 of the General Laws.

6.3. Building Permit

6.3.1. No building shall be erected within a subdivision without written permission from the Planning Board by Form I.

6.3.2. The Building Inspector shall not issue any permit for the erection of a building until he is first satisfied that the lot on which the building is to be erected is not within a subdivision or that a way furnishing the access to such lot as required by the Subdivision Control Law is shown on a plan recorded or entitled to be recorded under Chapter 41 Section 91-X, as amended and that any condition endorsed thereon limiting the right to erect or maintain buildings on such lot have been satisfied or waived by the Board, and in the event that more than one building for dwelling purposes be erected or placed or converted to use as such on any lot, that the Building Inspector is satisfied that consent has been obtained from the Planning Board in accord with Section 2.4. of these Rules and Regulations, Chapter 41 Section 81-Y, and amendments thereto.

6.3.3. In the case of a bond, surety or tripartite agreement no structure shall be occupied until at least the base course of bituminous concrete as specified in Section 5.0. has been applied to the streets which serve the structure. In the case of a covenant in lieu of a bond or surety no occupancy permit shall be issued until all improvements are completed.

6.4. Inspections

6.4.1. Inspections shall be arranged by the developer through the Planning Board Office for that purpose prior to the construction of streets and the installation of utilities and during construction as specified herein at each significant construction state. See Form K.

6.4.2. Inspection shall be requested in writing at least forty-eight (48) hours in advance of each regular inspection to the Planning Board. Inspection notification may be waived by the Planning Board Office in emergencies.

6.4.3. Inspection shall be by the Planning Board Agent upon direction of the Planning Office except where otherwise noted, for the following:

Clearing and Grubbing

Excavating operations

Laying of water and sewer mains, hydrants and related equipment by the Water Department

Laying of gas mains and related equipment

Installation of surface and sub-surface drainage system and related equipment

Filling and compacting

Installation of electric lines, and related equipment, including Cable TV lines

Installation of telephone lines and related equipment

Paving operations

Placing of curbs and gutters

Construction of sidewalks

Finish grading of grass plots

Installation of monuments

Grading of lots

Installation of fire alarm system

Planting of street trees

Final clean-up

And any other inspections deemed necessary by the Planning Board.

6.4.4. The placing of utilities and other underground construction will require the presence of the Planning Board Agent during the operations and before the work is covered up.

6.4.5. The Planning Board may establish the order of the required inspections and may require satisfactory completion of one step before the subdivider proceeds to the next. It may require tests to be done by the subdivider as a condition for approval when in the opinion of the Planning Board it is advisable.

6.4.6. The proper Town Official or agent shall indicate for Form K, Inspection Form, provided by the Planning Board, the date of inspection and the approval and shall file such form with the Planning Board whereupon the cost of the inspection shall be paid to the inspector from the Inspection Escrow account.

6.4.7. Failure to comply with the inspection procedure may necessitate removal of improvement at the expense of the applicants or rescission of the approval of the plan in accordance with Chapter 41, Section 81-W of the General Laws of Massachusetts.

6.5. Meetings

The Planning Board will hold regular and/or special meetings on such dates as will be designated and on file with the Town Clerk. Work project meetings may be held as requested by the Planning Board Chair/Coordinator, Planning Board Agent/Engineer, and other Board Agents with the applicants engineer, clerk of the works, or others during the construction period.

6.6. Validity

If, in any respect, any provision of these Rules and Regulations in whole or in part, shall prove to be invalid for any reason, such invalidity shall only affect the part of such provision which shall be invalid and in all other respects these Rules and Regulations shall stand as if such invalid provision had not been made and they shall fail to the extent, and only to the extent, of such invalid provision and no other provision of these Rules and Regulations shall be invalidated, impaired, or affected thereby.

6.7. Effective Date

These regulations become effective after approval by the Board, certification by the Town Clerk and filing with the Registry of Deeds and the Recorder of the Land Court.